

0 01

2 IN THE UNITED STATES DISTRICT COURT  
3 FOR THE NORTHERN DISTRICT OF OHIO  
4 EASTERN DIVISION

5 -----X

IN RE: NATIONAL PRESCRIPTION MDL No. 2804  
6 OPIATE LITIGATION,

Case No. 17-MD-2804

7 This document relates to:

8 All Cases Hon. Dan A. Polster

9 -----X

10 \* HIGHLY CONFIDENTIAL \*

11 \* SUBJECT TO FURTHER CONFIDENTIALITY REVIEW \*

12 VIDEOTAPED DEPOSITION

13 OF

14 LACEY R. KELLER

15 New York, New York

16 Thursday, June 13, 2019

17

18

19

20

21

22

23

Reported by:

24 ANNETTE ARLEQUIN, CCR, RPR, CRR, RSA

25

1

2

3

4

5

June 13, 2019

6

9:10 a.m.

7

8

HIGHLY CONFIDENTIAL - SUBJECT TO

9

FURTHER CONFIDENTIALITY REVIEW

10

videotaped deposition of LACEY R.

11

KELLER, held at the offices of

12

KIRKLAND & ELLIS LLP, 601 Lexington

13

Avenue, New York, New York, pursuant to

14

Notice, before Annette Arlequin, a

15

Certified Court Reporter, a Registered

16

Professional Reporter, a Realtime

17

Systems Administrator, a Certified

18

Realtime Reporter, and a Notary Public

19

of the State of New York and New

20

Jersey.

21

22

23

24

25

1

2           A P P E A R A N C E S:

3

4           SIMMONS HANLY CONROY LLC

5           Counsel for Plaintiffs

6                   112 Madison Avenue, 7th floor

7                   New York, New York   10016-7416

8           BY: JAYNE CONROY, ESQ.

9                   JConroy@simmonsfirm.com

10          BY: LAURA L. FITZPATRICK, ESQ.

11                   Lfitzpatrick@simmonsfirm.com

12                   - and -

13          MOTLEY RICE LLC

14          Counsel for Plaintiffs

15                   28 Bridgeside Boulevard

16                   Mt. Pleasant, South Carolina   29464

17          BY: JAMES W. LEDLIE, ESQ.

18                   Jledlie@motleyrice.com

19

20

21

22

23

24

25

1

2           A P P E A R A N C E S (Cont'd.):

3

4           KIRKLAND & ELLIS LLP

5           Counsel for Allergan Finance

6                   1301 Pennsylvania Avenue, N.W.

7                   Washington, D.C. 20004

8           BY: JENNIFER LEVY, ESQ.

9                   Jennifer.levy@kirkland.com

10          BY: CATIE VENTURA, ESQ.

11                  Catie.ventura@kirkland.com

12

13          O'MELVENY & MYERS LLP

14          Counsel for Janssen Pharmaceutical and

15                  Johnson & Johnson

16                   1999 Avenue of the Stars - 8th Floor

17                   Los Angeles, California 90067-6035

18          BY: AMY R. LUCAS, ESQ.

19                  Alucas@omm.com

20          BY: J. KEITH KOBYLKA, ESQ.

21                  (Telephonically/realtime stream)

22

23

24

25

1

2 A P P E A R A N C E S (Cont'd.):

3

4 MORGAN LEWIS & BOCKIUS LLP

5 Counsel for Teva, Cephalon and Actavis

6 1701 Market Street

7 Philadelphia, Pennsylvania 19103-2921

8 BY: ADAM HAMMOUD, ESQ.

9 Adam.hammoud@morganlewis.com

10

11 ARNOLD & PORTER KAYE SCHOLER LLP

12 Counsel for Endo Health Solutions Endo

13 Pharmaceuticals, Inc.; Par Pharmaceutical

14 Companies, Inc. f/k/a Par Pharmaceutical

15 Holdings, Inc.

16 601 Massachusetts Avenue N.W.

17 Washington, D.C. 20001-3743

18 BY: JOANNA PERSIO, ESQ.

19 Joanna.persio@arnoldporter.com

20

21

22

23

24

25

1

2 A P P E A R A N C E S (Cont'd.):

3 DECHERT LLP

4 Counsel for Purdue Pharmaceuticals

5 Three Bryant Park

6 1095 Avenue of the Americas

7 New York, New York 10036-6797

8 BY: DEBRA D. O'GORMAN, ESQ.

9 Debra.ogorman@dechert.com

10

11 ZUCKERMAN SPAEDER LLP

12 Counsel for CVS Indiana, LLC and CVS RX

13 Services, Inc.

14 1800 M Street N.W. - Suite 1000

15 Washington, D.C. 20036-5807

16 BY: PAUL B. HYNES, JR., ESQ.

17 Phynes@zuckerman.com

18

19 MORGAN LEWIS & BOCKIUS LLP

20 Counsel for Rite Aid of Maryland

21 1701 Market Street

22 Philadelphia, Pennsylvania 19103-2921

23 BY: JOHN P. LAVELLE, JR., Partner

24 John.lavelle@morganlewis.com

25

1

2 A P P E A R A N C E S (Cont'd.):

3 ROPES & GRAY LLP

4 Counsel for Mallinckrodt

5 Prudential Tower

6 800 Boylston Street

7 Boston, Massachusetts 02199

8 BY: JOSH GOLDSTEIN, ESQ.

9 Joshua.goldstein@ropesgray.com

10 BY: FEIFEI (ANDREA) REN, ESQ.

11 Andrea.Ren@ropesgray.com

12

13 COVINGTON & BURLING LLP

14 Counsel for McKesson

15 One CityCenter

16 850 Tenth Street, N.W.

17 Washington D.C. 20001-4956

18 BY: CLAIRE CATALANO DEAN, ESQ.

19 ccdean@cov.com

20

21

22

23

24

25

1

2       A P P E A R A N C E S (Cont'd.):

3       BARTLIT BECK LLP

4       Counsel for Walgreens

5             54 West Hubbard Street - Suite 300

6             Chicago, IL 60654

7       BY: PETER B. BENSINGER, JR., ESQ.

8             Peter.bensinger@bartlitt-beck.com

9             (Telephonically/realtime stream.)

10

11       FOLEY LARDNER LLP

12       Counsel for Anda, Inc.

13             111 Huntington Avenue - Suite 2500

14             Boston, MA 02199-7610

15       BY: GRAHAM D. WELCH, ESQ.

16             Gwelch@foley.com

17             (Telephonically/realtime stream.)

18

19       BARNES & THORNBURG LLP

20       Counsel for H.D. Smith

21             11 South Meridian Street

22             Indianapolis Indiana 46204-3535

23       BY: KATHLEEN L. MATSOUKAS, ESQ.

24             Kathleen.matsoukas@btlaw.com

25             (Telephonically/realtime stream.)



1

2           A P P E A R A N C E S (Cont'd.):

3

4           LOCKE LORD LLP

5           Counsel for Henry Schein, Inc. and

6           Henry Schein Medical Systems, Inc.

7           2200 Ross Avenue - Suite 2800

8           Dallas, Texas 75201

9           BY: BRANDAN MONTMINY, ESQ.

10           Brandan.montminy@lockelord.com

11           (Telephonically/realtime stream.)

12

13           ALSO PRESENT:

14

15           VINCE ROSICA, Golkow, Legal Video Specialist

16           DAN LAWLOR, Golkow, Legal Video Specialist

17

18

19

20

21

22

23

24

25

1

2

IT IS HEREBY STIPULATED AND

3

AGREED by and between the attorneys for

4

the respective parties herein, that

5

filing and sealing be and the same are

6

hereby waived;

7

IT IS FURTHER STIPULATED AND

8

AGREED that all objections, except as

9

to the form of the question, shall be

10

reserved to the time of the trial;

11

IT IS FURTHER STIPULATED AND

12

AGREED that the within deposition may

13

be sworn to and signed before any

14

officer authorized to administer an

15

oath, with the same force and effect as

16

if signed and sworn to before the

17

Court.

18

19

- o0o -

20

21

22

23

24

25

1

2

THE VIDEOGRAPHER: We are now on

3

the record. My name is Vince Rosica.

4

I'm a videographer for Golkow

5

Litigation Services.

6

Today's date is June 13, 2019,

7

and the time is 9:10 a.m.

8

This video deposition is being

9

held in New York, New York, in the

10

matter of National Prescription Opiate

11

Litigation, MDL No. 2804, for the

12

United States District Court for the

13

Northern District of Ohio, Eastern

14

Division.

15

The deponent is Lacey Keller.

16

Counsel will be noted on the

17

stenographic record.

18

The court reporter is Annette

19

Arlequin and will now swear in the

20

witness.

21

\*

\*

\*

22

L A C E Y R. K E L L E R, called as a

23

witness, having been duly sworn by a

24

Notary Public, was examined and

25

testified as follows:

1

2

THE WITNESS: I do.

3

Lacey Rae Keller.

4

EXAMINATION BY

5

MS. LEVY:

6

Q. Good morning, Ms. Keller. My

7

name is Jenny Levy, and I'm an attorney

8

here at Kirkland & Ellis. I represent the

9

Allergan defendants in this case.

10

Thank you for being here today.

11

Apologies in advance for my scratchy voice

12

and sniffles. I'm feeling very under the

13

weather, so I will do my best to keep my

14

germs away from you.

15

Have you ever had your deposition

16

before?

17

A. Good morning, Jenny. Thanks for

18

having me. And no.

19

Q. This is the first deposition

20

experience you've ever had?

21

A. Correct.

22

Q. In the course of your work either

23

at the New York Attorney General's Office

24

or previously with SEIU, did you sit in on

25

any depositions or is this the first time

1

2       you've had this experience?

3

4             A.    This is the first time I've had  
5       this experience.

6

7             Q.    You've never been to a deposition  
8       before?

9

10            A.    That is correct.

11

12            Q.    Okay. Let me tell you, just so  
13       you're comfortable, how this is going to  
14       go.

15

16                   We have a court reporter to my  
17       right, your left, who is typing out every  
18       word that I'm saying and every word that  
19       you will say, in addition to our  
20       videographer.

21

22                   Because she is typing all of our  
23       words, it's important that instead of the  
24       way we would normally communicate, maybe  
25       nodding our your head or saying "uh-huh,"  
26       that you do your best to speak in words  
27       when you answer my question.

28

29                   Does that make sense?

30

31            A.    That makes sense.

32

33            Q.    Okay. Thanks.

34

35                   And if you don't understand the

1

2       question I'm asking you, please absolutely  
3       feel free to tell me that, and I will do my  
4       very best to rephrase it. I don't want the  
5       questions to be tricky. They're not  
6       intended to confuse you. I would like to  
7       make sure that you understand them before  
8       you answer them.

9                   Can we agree that if you don't,  
10       you'll ask me to rephrase?

11               A.    Thanks. I will.

12               Q.    Is there any reason that you  
13       can't give truthful, honest testimony  
14       today?

15               A.    No.

16               Q.    Okay. I'm going to ask you  
17       questions. The attorneys that came with  
18       you today may object to questions that I  
19       ask. Unless they instruct you not to  
20       answer, I would ask that you please answer  
21       the questions.

22                   If they instruct you not to  
23       answer, we'll probably quibble about that,  
24       but you'll get to follow your counsel's  
25       advice on that; otherwise, we can take

1

2 breaks?

3

4 If you need a break at any time,  
5 I would ask that you just answer any  
6 pending question I have before we take a  
7 break.

8

9 So if you need to use the  
10 restroom or check your email or are hungry  
11 or any of that, feel free to just tell me  
12 and we can take a break when we get to an  
13 appropriate stopping point.

14

15 MS. LEVY: Okay. I would like to  
16 mark as Exhibit 1, the deposition  
17 notice that was issued in this case.

18

19 (Keller Exhibit 1, Track 1  
20 Defendants' Second Amended Notice of  
21 Oral Videotaped Deposition of Lacey R.  
22 Keller, marked for identification, as  
23 of this date.)

24

25 MS. LEVY: Do you folks want  
copies, physical copies of the  
exhibits? If you do, just raise your  
hand. I'm going to pass them down  
through Catie. And share them among  
yourselves.

1

2

If there are any exhibits that

3

folks would like me to put on the ELMO,

4

please just say so.

5

BY MS. LEVY:

6

Q. Ms. Keller, have you seen this

7

deposition notice before?

8

A. No.

9

Q. This is the first time you've

10

taken a look at it?

11

A. Yes.

12

Q. Okay. If you don't mind, please

13

turn to the back page that says Exhibit A.

14

Exhibit A is a request for three

15

categories of documents.

16

Do you see that?

17

A. I do.

18

Q. Okay. Let's start with No. 1,

19

"All documents or other materials you

20

reviewed since the date of your report that

21

have not specifically been identified in

22

your report in preparation for your

23

expected testimony."

24

Do you see that?

25

A. I do.



1

2 Q. Have you prepared a list of  
3 documents that would respond to No. 1?

4 A. I believe I have.

5 Q. Okay. I'm going to mark what  
6 is -- I'm going to hand you what we're  
7 going to mark as Exhibit 2.

8 (Keller Exhibit 2, List of  
9 documents that respond to request 1 in  
10 Exhibit A on Exhibit 1, marked for  
11 identification, as of this date.)

12 BY MS. LEVY:

13 Q. Do you see Exhibit 2?

14 A. I do.

15 Q. Take a look at that. Is  
16 Exhibit 2 a list of documents that respond  
17 to request 1 in Exhibit A on Exhibit 1?

18 A. It's my intention that it does.

19 Q. Okay. That's what I figured.

20 How did -- who prepared

21 Exhibit 2?

22 A. Exhibit 2, I'm sorry, yes. I  
23 did.

24 Q. And how did you prepare  
25 Exhibit 2? What did you do to come up with

1

2           that list?

3           A.     Specifically to make the list or  
4     for the items?

5           Q.     To make the list.

6           A.     To make the list? To be honest,  
7     we wrote a Python script to go through all  
8     the documents that I used to rely on, and  
9     then I compiled the actual Excel  
10    spreadsheet or list that you guys received.

11          Q.     You used data science to make a  
12    list. I'm impressed.

13                 And so am I correct that  
14    Exhibit 2 reflects all the materials that  
15    were not cited in your report but that you  
16    have reviewed and relied on to form your  
17    opinions since your report? Is that  
18    correct?

19          A.     Yes. There may be some overlap.  
20    There might be some citations here that  
21    were in the original covered items, but I  
22    just didn't want to exclude anything, so to  
23    be thorough, I put them all here.

24          Q.     Got it.

25                 And other than the materials

1

2       cited in your report and the materials  
3       listed in Exhibit 2 as additional reliance  
4       materials, are there any other materials  
5       that you relied on in forming your opinions  
6       in this case?

7             A.    No.

8             Q.    If we look back at Exhibit 1,  
9       Item No. 2 in Exhibit A in Exhibit 1 asked  
10      for an "itemization of the hours spent, the  
11      compensation paid or to be paid for your  
12      work in this matter and your staff's work  
13      in this matter, including all invoices you  
14      have submitted to counsel."

15                Do you see that?

16             A.    Yes, I do.

17             Q.    Did you prepare and give to  
18      counsel a list of your invoices that  
19      reflect all of the work you've done in this  
20      case?

21             A.    Yes, I have.

22             Q.    Okay.

23                   (Keller Exhibit 3, Gryphon  
24      Strategies Invoice dated 5/30/19,  
25      Bates-stamped OPIOIDMDL\_KELLER\_000036

1

2 through 35, marked for identification,  
3 as of this date.)

4 MS. LEVY: Let's go off the  
5 record for just a minute.

6 THE VIDEOGRAPHER: The time is  
7 9:18 a.m. We are now off the record.

8 (Off the record.)

9 THE VIDEOGRAPHER: The time is  
10 9:20 a.m. We are back on the record.

11 BY MS. LEVY:

12 Q. Ms. Keller, take a look at  
13 Exhibit 3 that we've put in front of you.

14 A. I have it.

15 Q. What is Exhibit 3?

16 A. These are our invoices.

17 Q. And is Exhibit 3 a comprehensive  
18 list of all invoices that Gryphon  
19 Strategies has submitted in this case?

20 MS. CONROY: Objection.

21 You can go ahead and answer.

22 THE WITNESS: Okay.

23 A. To the best of my knowledge, yes.

24 Q. Okay.

25 A. And it's Gryphon.

1

2 Q. Sorry. Thank you.

3 A. Everyone says Gryphon so...

4 Q. The dragon makes it look like it  
5 should be a more dramatic name. Gryphon.

6 Okay. Thank you for correcting me.

7 What is Gryphon Strategies?

8 A. Gryphon Strategies is a private  
9 investigation consulting firm.

10 Q. And you went to work at Gryphon  
11 Strategies in 2017?

12 A. Yes.

13 Q. From the New York Attorney  
14 General's Office?

15 A. Correct.

16 Q. You weren't the founder. It  
17 existed before you got there, correct?

18 A. Correct.

19 Q. How many individuals, roughly,  
20 work at Gryphon Strategies?

21 A. When I started, it was probably  
22 around 50. My guess is that number is much  
23 larger now. Probably around 70.

24 Q. Does Gryphon have, like, multiple  
25 places of business or is it all located in

1

2 White Plains?

3 A. There are multiple offices. So  
4 the headquarters is in White Plains. We  
5 have a satellite office in the city here.  
6 And I believe they're in process of opening  
7 a few offices around the rest of the world.

8 Q. And where do you work?

9 A. I work in New York City.

10 Q. How many folks work with you in  
11 New York City?

12 A. Around seven to nine, depending  
13 on our intern flux.

14 Q. Okay. And how many individuals  
15 have worked with you on this case?

16 A. Sorry, let me just do the math.

17 Q. Sure.

18 A. Around six.

19 Q. Got it.

20 Is there anybody above you or  
21 that you report to within Gryphon on this  
22 case or are you the boss?

23 A. I'm the boss of our division,  
24 yes.

25 Q. And the other individuals that

1

2       have worked on this matter are reporting to  
3       you or work for you; is that fair?

4             A.     Correct. They report directly to  
5       me.

6             Q.     Gotcha.

7                     Does Exhibit 3 and the work that  
8       is covered by the invoices in Exhibit 3  
9       cover all of the work that Gryphon  
10      Strategies has done on this matter?

11             A.     For data mining and analytics.  
12      Correct.

13             Q.     Is there other work besides data  
14      mining and analytics that Gryphon  
15      Strategies has done on this matter?

16                     MS. CONROY: Objection.

17                     You can answer.

18             A.     Yes.

19             Q.     And what category of other work?

20                     MS. CONROY: Just before you  
21      answer, I don't want -- this is an area  
22      where there is some attorney work  
23      product. If you inquire a little bit  
24      more, it has nothing to do -- Lacey is  
25      not involved in that.

1

2 MS. LEVY: Okay.

3 BY MS. LEVY:

4 Q. For the questions that I ask you  
5 about this other work, I do not want you to  
6 answer any specifics of that. We are very  
7 worried about attorney-client privilege, so  
8 we don't want, we don't want anything  
9 confidential that attorneys have said to  
10 you or you have said to attorneys or that  
11 you know of that attorneys have said to  
12 Gryphon or Gryphon has said to be revealed  
13 in my questions.

14 But, generally, is it true to say  
15 in addition to data mining and analytics,  
16 Gryphon Strategies has performed other  
17 services related to the opioid matter?

18 A. That is correct to say.

19 Q. And have you been involved in any  
20 work other than data mining and analytics  
21 for this matter?

22 A. No. I have only done data mining  
23 and analytics for this matter.

24 Q. Have you participated in meetings  
25 related to the other work that Gryphon



1

2 Strategies is doing or has done for the  
3 opioid matter?

4 A. No.

5 Q. Has there been any overlap  
6 between your work and the other work that  
7 Gryphon Strategies is doing?

8 A. How would you define overlap?

9 Q. So is there a wall between you  
10 and your team that Gryphon has put in place  
11 and others at Gryphon who are doing  
12 different work?

13 A. No. We share an office. So like  
14 we're all in the same work space. Even  
15 physically, there is not a wall. But even  
16 metaphorically, no.

17 Q. I guess I should be more clear  
18 about that.

19 Has Gryphon Strategies put in  
20 place what lawyers would call a Chinese  
21 wall?

22 Are you familiar with the term  
23 "Chinese wall"?

24 A. Yeah, sort of.

25 Q. Has Gryphon Strategies put in

1

2 place a procedure by which your team is  
3 walled off from other teams at Gryphon  
4 doing work on the opioid litigation?

5 A. Not explicitly, no.

6 Q. Have you had communications, you  
7 personally, with others at Gryphon who are  
8 doing other types of work other than data  
9 mining and analytics about the opioid  
10 litigation or the work that's being done in  
11 the opioid litigation?

12 A. Yes.

13 Q. Who, just names of individuals,  
14 who specifically have you communicated with  
15 at Gryphon that's not on your team  
16 regarding your work in this case?

17 A. So in not great detail, my boss,  
18 Jay Dawdy. He is the president of the  
19 firm. Mostly just to update him on what  
20 we're doing with all of our time. And Eric  
21 Nawrocki. I can provide a spelling on that  
22 one if that's difficult.

23 Q. Who is Eric Nawrocki?

24 A. Eric Nawrocki is another managing  
25 director.

1

2 Q. And what is your title at Gryphon  
3 Strategies? You're a managing director as  
4 well, right?

5 A. Correct.

6 Q. How many managing directors are  
7 there?

8 A. I think there's around four or  
9 five. I'd have to check the website to be  
10 certain.

11 Q. Have you done any work relating  
12 in any way to the opioid litigation or your  
13 retention in this case with individuals  
14 outside of the New York City office?

15 MS. CONROY: You mean Gryphon?

16 MS. LEVY: Yes.

17 A. So Jay Dawdy is primarily based  
18 in the White Plains office. Eric is based  
19 primarily in the New York City office, if  
20 that helps answer the question.

21 Q. And how has the work that you  
22 have done on data and analytics overlapped  
23 with the work that -- with what you've  
24 communicated with others in the firm? What  
25 is the overlap?

1

2           A.     There's very little. Their work  
3     is primarily concerned with people and  
4     we're more with the numbers, to the extent  
5     that the people have numbers. For example,  
6     like numbers of prescriptions in the IQVIA  
7     data, that would be one place where you  
8     could imagine some overlap.

9           Q.     Have you shared data sets with  
10    other teams in Gryphon working on opioid  
11    matters?

12          A.     Data sets?

13          Q.     Yes.

14          A.     No.

15          Q.     Have you shared ARCOS data with  
16    other teams in Gryphon?

17          A.     No.

18          Q.     Have you shared chargeback data  
19    with other teams in Gryphon?

20          A.     No.

21          Q.     Have you shared any of the data  
22    provided to you by the attorneys in this  
23    case with others at Gryphon?

24          A.     Not in its raw form, no.

25          Q.     Have you shared in any form?

1

2           A.    I have provided some aggregated  
3           statistics.

4           Q.    What aggregated statistics have  
5           you provided to others in your firm?

6           A.    One -- an example would be like  
7           the prescriptions of a physician over time.  
8           Just like in the report, we talk about  
9           Adolf Harper, so the number of  
10          prescriptions that Adolf Harper wrote over  
11          time.

12          Q.    I think I understand.

13                    So aggregated statistics relating  
14          to individuals, is that the category of  
15          data that you shared?

16          A.    Yes, individuals --

17          Q.    Individual prescribers?

18          A.    Yeah.   Maybe a pharmacy.

19          Q.    Is there any other category of  
20          data that you can think of that you shared  
21          with others that are not on your data and  
22          analytics team?

23          A.    Not at this time, no.

24          Q.    Okay.

25                   MS. LEVY:  I think we're up to

1

2

Exhibit 4.

3

(Keller Exhibit 4, Resume of

4

Lacey R. Keller, not Bates-stamped,

5

marked for identification, as of this

6

date.)

7

BY MS. LEVY:

8

Q. What is Exhibit 4?

9

A. That's a question for me? Sorry.

10

Q. Yes.

11

A. Okay.

12

Q. It should be an easy one.

13

A. Boy, I hope so. That's my CV or

14

my resumé.

15

Q. Okay. And going back to

16

Exhibit 1, Exhibit 1, the last page of

17

Exhibit 1 on Exhibit A, No. 3 asked for a

18

"copy of the most current and accurate

19

curriculum vitae, CV, as of the date of

20

your deposition."

21

Is the document that we've

22

labeled Exhibit 4 a copy of your most

23

recent CV?

24

A. Yes.

25

Q. And when was this created?

1

2 A. Just before we filed the report.

3 Q. And you haven't added anything to  
4 your resumé since then?

5 A. No.

6 Q. Taking a look at Exhibit 4, and  
7 starting at the top left, you are currently  
8 a managing director at Gryphon where you've  
9 worked from November 2017 to the present,  
10 about a year-and-a-half, correct?

11 A. That is correct.

12 Q. Did you start at Gryphon as a  
13 managing director or did you start with a  
14 different title?

15 A. I started as a managing director.

16 Q. How did you get the job at  
17 Gryphon? Who hired you? How did that come  
18 about?

19 A. Yeah, so at the time, I was  
20 working at the Attorney General's Office  
21 and Jay Dawdy had approached me about  
22 coming to the firm to start their data  
23 mining and analytics practice. He thought  
24 the work that we were doing at the AG's  
25 office was super innovative and wanted to

1

2       see if I'd be interested in doing that with  
3       him.

4             Q.    Did you know Jay Dawdy before  
5       that?

6             A.    No, I didn't.

7             Q.    How do you spell Dawdy?

8             A.    D-a-w-d-y.

9             Q.    Dawdy. I'm from the south. We  
10       say "Dowdy."

11            A.    Yes.

12            Q.    And so how did he know about you?

13            A.    Boy, I have to remember. I  
14       believe we had an intern in common. And so  
15       I had an intern and then that intern went  
16       to be his intern or staff. And the intern  
17       had said, boy, there's this lady, you need  
18       to speak with her. And so I think that's  
19       how we got to know each other.

20            Q.    Have your job response -- what,  
21       in general, are your job responsibilities  
22       as a managing director at Gryphon?

23            A.    So generally that means running  
24       the data team and building out that  
25       practice.



1

2           Q.    Do you have clients right now  
3           other than clients related to this  
4           litigation?  Not tell me what they are,  
5           just a "yes" or "no" question.

6           A.    Yes.

7           Q.    What percentage of your work is  
8           related to this litigation as opposed to  
9           other clients not related to this  
10          litigation?

11          A.    I don't have an exact number, but  
12          the vast majority is this litigation.

13          Q.    Would you say like 75, 80  
14          percentish?  I know you're estimating.

15          A.    Yeah, the data part of me doesn't  
16          want to do that, but, yeah --

17          Q.    Okay.

18          A.    -- or more.

19          Q.    And not naming other clients,  
20          particularly if they're confidential, but  
21          other than this litigation, what types of  
22          other clients and work are you doing in  
23          addition to this?

24          A.    So we have governmental clients.

25          Q.    And your governmental clients, is

1

2       that related to pharmaceuticals or other  
3       issues?

4             A.     Completely separate issues.

5             Q.     Okay. Do you have any other  
6       clients that relate in any way to  
7       pharmaceuticals or opioids?

8             A.     No.

9             Q.     Okay. Now turning to your work  
10       at the New York Attorney General's Office,  
11       how did you get that job?

12            A.     So I was at the union at the time  
13       and was looking for the next step. A  
14       friend of mine had said that they were  
15       looking for a researcher at the AG's  
16       office, and I thought that would be at  
17       first a pretty boring job and that I would  
18       just be reading documents all day in a  
19       taupe office. But after meeting with them,  
20       I realized it would be a pretty exciting  
21       job because they wanted to build out a data  
22       mining practice there and make leads out of  
23       big data.

24            Q.     I'm smiling because I actually  
25       did some research on you and I watched your

1

2       YouTube video on this, and I've seen how  
3       excitedly you describe particularly how you  
4       thought it was going to be boring.

5               Is the work that you did -- you  
6       were at the New York Attorney's General  
7       Office from October 2013 through  
8       November 2017, just over four years,  
9       correct?

10           A.    That is correct.

11           Q.    Is the work that you did or the  
12       categories or types of matters you worked  
13       on all summarized on Exhibit 4 in the  
14       section under New York State Attorney  
15       General's Office?

16           A.    I am sure there's much more that  
17       I worked on or supervised.

18           Q.    Okay. Fair enough.

19               From your, from the YouTube  
20       video -- you know what YouTube video I'm  
21       referring to? It was a Washburn alumni  
22       thing?

23           A.    Yeah.

24           Q.    From the YouTube video, I -- you  
25       made some comment about why you thought it

1

2       wasn't boring, which is you realized that  
3       you could take data and learn how to chase  
4       leads.

5                   Do you remember saying that?

6           A.    Yes.

7           Q.    Is that a good description of  
8       what you were doing at the U.S. Attorney  
9       General's Office?

10          A.    It's New York Attorney General's  
11       Office and -- for the record.

12                   Yeah.

13          Q.    I'm sorry. I thought -- I didn't  
14       mean to say U.S. Attorney General, I meant  
15       to say New York.

16                   So on your CV, you list several  
17       areas in which you used data and data  
18       mining techniques in order to generate  
19       leads on cases. And one is in the gun and  
20       firearms space.

21                   And a second one is using data  
22       analytics to figure out leads on, I guess,  
23       vendors with respect to Internet speed?

24          A.    Oh, yes.

25          Q.    I also see here, I'm combining

1

2       your CV and your report, but experience  
3       that you have with using data to generate  
4       leads in the Airbnb rental space.

5                   Is that also part of your work?

6           A.    Those all three are part of my  
7       work, yes.

8           Q.    And you also used data analytics  
9       to do modeling of landlord complaints?  
10       Specifically, generate leads with, like,  
11       landlords who are out of compliance with  
12       tax laws?

13          A.    Oh, yes, that would be the  
14       421(a) .

15          Q.    I see that you, in your  
16       experience, have used data to generate  
17       leads on fake trades in foreign currency?

18          A.    Yes, I supervised that work, but,  
19       yes.

20          Q.    In your, in the combination of  
21       your report and other information I could  
22       find about you and your CV, I see one area  
23       where you have, where your work in data  
24       analytics has overlapped with the  
25       pharmaceutical industry, and that is when

1

2       you were modeling data that could help with  
3       the deployment of Naloxone?

4             A.     Sure.

5             Q.     Am I correct about that?

6             A.     Yes, you're correct about that.

7             Q.     So up until your work on this  
8       case, have you done any other work with  
9       data and analytics related to the  
10      pharmaceutical industry?

11            A.     Yes.

12            Q.     What was that?

13            A.     At a high level, it would have  
14      been pulling publicly available data on  
15      opioids, hospitalizations, opioid  
16      prescribing, so that would be like the  
17      public ARCOS reports. And, I'm sorry,  
18      those aren't prescribed, those are  
19      shipments. So the public ARCOS reports and  
20      New York State hospitalization data, is one  
21      example.

22            Q.     Okay. So I want to make sure my  
23      record is clear.

24                    Prior to your work on this case  
25      that you're doing through Gryphon, you had

1

2 prior experience with a project at the New  
3 York Attorney General's Office that related  
4 to, I'm going to say, Naloxone deployment.

5 Is that a fair way to categorize  
6 it?

7 A. So the Naloxone deployment, yes,  
8 that was the Community Overdose and  
9 Prevention program is what we called it,  
10 the COP program. And so that was the  
11 deployment of Naloxone around the state and  
12 to police officers. So we equipped every  
13 police officer with the life-saving Narcan.  
14 And so I managed that program.

15 Q. And the way you did that,  
16 describe what data you looked at generally.  
17 We don't need to educate ourselves fully  
18 about the project, but, generally, what was  
19 the data, what did you look at, and what  
20 was your methodology for working on the COP  
21 project?

22 A. So, I remember it was the fall  
23 that Philip Seymour Hoffman died that that  
24 was when the office took an interest in  
25 opioids generally. And so I was tasked

1

2       with finding something that was of  
3       importance to do in the area.

4               And so I wouldn't say that it was  
5       really data driven. I didn't deploy based  
6       off of, you know, this is where the most  
7       overdoses were occurring, because at that  
8       time, that data set really didn't exist in  
9       a robust fashion.

10              So it was just a "raise your  
11       hand" program, if you will. So if a police  
12       department came to us and said, look, we  
13       could use some money to buy this Narcan,  
14       then we would give them that, that funds.

15              Q.   And so you analyzed a segment of  
16       ARCOS data in your in your work in figuring  
17       out how to best deploy Naloxone.

18              Is that true or false?

19              A.   That's not -- that would be  
20       false.

21              Q.   Okay. Did you not -- you did not  
22       use ARCOS data?

23              A.   No.

24              Q.   Okay.

25              A.   Not for the -- I used ARCOS data



1

2 for other things, but not for that, no.

3 Q. Okay. What in the past have you  
4 used ARCOS data for?

5 A. So I've only used the public  
6 ARCOS data in the past, and that was mostly  
7 to get a general sense of where the  
8 shipments were going into New York.

9 Q. And was that in conjunction with  
10 the Naloxone project or was that for  
11 something else?

12 A. I can't be -- I can't really  
13 recall the timing, but it was either around  
14 that time or shortly -- or probably  
15 subsequent. I'm trying to think of where I  
16 was, but, yeah.

17 Q. And what did you do with the  
18 results of your analysis? What was the  
19 results and what did you do with it?

20 A. I wrote a pretty high level memo  
21 about, like, the state of opioids in New  
22 York as much as I could from public data.

23 Q. And what did you -- what did it  
24 say?

25 A. I mean, I wrote it years ago, so

1

2 I can't remember exactly. But at a high  
3 level, it would have the number of  
4 shipments into the state. I think we were  
5 able to get it by ZIP three. I think we  
6 ended up mapping it to counties because  
7 people have counties here, not ZIP codes.

8 The number of deaths over time,  
9 the number of hospitalizations over time,  
10 specifically opioid-related deaths and  
11 opioid-related hospitalizations.

12 My guess is it would have also  
13 included some open payments data as well  
14 from Center for Medicaid Studies. And it  
15 would have just summarized all of those at  
16 a fairly high level.

17 Q. And do you know what it would  
18 used for? Who it was submitted to?

19 A. I'm not sure exactly who it was  
20 submitted to.

21 Q. Or what happened with it?

22 A. I don't know exactly what  
23 happened with it. It's hard to tell.

24 Q. And what year were you conducting  
25 this analysis and drafting this memo?

1

2           A.    I'm sorry, I have to think a  
3           little bit. I want to say around  
4           2015-2016.

5                   Things get picked up and put down  
6           quite a bit in government, especially as  
7           more pressing matters come to light so...

8           Q.    On your -- so other than the work  
9           you've just described in analyzing -- what  
10          do you call that project that you just  
11          talked about? It's different from the  
12          Naloxone COP project. What do you call  
13          that segment of work?

14          A.    So that segment of work is a  
15          pretty typical request of my team at the  
16          AG's offices. Like, we were the -- we were  
17          a data-driven research team, but  
18          fundamentally we are a research team. So  
19          give us the facts about whatever. So, you  
20          know, you could call it briefings or  
21          whatnot, but they were, you know, fact,  
22          factual-driven documents so...

23          Q.    Opioid research?

24          A.    Yes. It was one example, but  
25          I've written them on, you know, payroll

1

2 cards and other unrelated things as well.

3 That's pretty much what we did at that

4 office, in addition to data support.

5 Q. So if I want to hone in on your

6 opioid and pharmaceutical experience, I --

7 you've told me about the Naloxone

8 deployment COP project. You've told me

9 about opioid research and data that you did

10 with the New York Attorney General's

11 Office.

12 Aside from those two things, do

13 you have any other experience looking at

14 pharmaceutical data prior to this case?

15 A. Not prior to this case, that I

16 recall.

17 Q. Since you have begun your work on

18 this case, do you have any additional work

19 in the pharmaceutical space? Without

20 revealing any confidences.

21 A. Not that I am currently

22 contracted for or being paid to do work on.

23 Q. Like potential leads or potential

24 clients you're thinking about, but nothing

25 that you've actually done yet; is that

1

2 correct?

3

A. Correct, nothing that I've  
4 submitted an invoice to or could bill hours  
5 to.

6

Q. Is the education in the top  
7 right-hand corner that is reflected in  
8 Exhibit 4, does this continue to be  
9 accurate today?

10

A. Yes.

11

Q. Do you have a Master's of Arts  
12 from the New School in 2010; is that  
13 correct?

14

A. That is correct.

15

Q. Bachelor of Business  
16 Administration in Economics from Washburn  
17 University, 2008?

18

A. That is correct.

19

Q. And a certificate in data  
20 science, it says General Assembly, 2015.

21

What does that mean?

22

A. General Assembly, I'm not sure if  
23 it's still around, was like an evening boot  
24 camp for-profit -- I think it's a  
25 for-profit institution to learn data

1

2 science.

3

4 So I took a semester-long evening  
5 class while I was at the AG's office to  
6 kind of brush up on my skills because I  
7 wanted to know a little bit more about the  
8 field and where we were headed.

8

9 Q. When you describe your profession  
10 to people at the dinner table, are you a  
11 data scientist?

11

12 A. So that term gets thrown around a  
13 lot. I would say -- pure data scientist,  
14 would say no. I use that title because  
15 it's a known quantity. I would not call  
16 myself a data scientist. I'm a manager of  
17 data scientists, is a much better  
18 reflection of my --

18

19 Q. Okay. And what is the difference  
20 between those two things in your mind?  
21 I've never heard the distinction. I'm  
22 asking very genuinely.

22

23 A. So a data scientist, in my  
24 opinion, are going to be fluent in several  
25 different languages. And not like French  
or Arabic like as you and I would think of

1

2       them, but more like SQL, Python, whatever  
3       programming languages you fancy, and be  
4       able to work in multiple platforms easily.

5                   I have those skills as well, but  
6       I don't use them every single day like they  
7       do. And so I'm much more in the managing  
8       and prioritizing of the workflow,  
9       fact-checking, confirming that the process  
10      is right, the assumptions are correct.

11           Q.    Got it.

12                   And so if I ask you, what is your  
13      expertise, how do you describe it to me? I  
14      am an expert in?

15           A.    I'm an expert in seeing the big  
16      picture, the data sources that are  
17      available to me, combining them, whether  
18      they be public, private, confidential, and  
19      using them for results.

20           Q.    I think I know the answer to  
21      these, but I have to ask them anyway.

22                   You don't have a law degree,  
23      correct?

24           A.    That is correct.

25           Q.    And you are not an expert in the

1

2 law, right?

3 A. I am not an expert in the law.

4 Q. And you don't intend to offer any  
5 legal opinions in this case?

6 A. I do not.

7 Q. You have not ever worked in drug  
8 enforcement, have you?

9 A. No, I have never worked in drug  
10 enforcement.

11 Q. You are not an expert on the  
12 Controlled Substances Act, are you?

13 A. That is correct, I am not an  
14 expert in the Controlled Substance Act.

15 Q. You have not ever worked with the  
16 DEA, have you?

17 A. I have not. I have not worked  
18 with the DEA.

19 Q. And you are not an expert in DEA  
20 requirements and regulations, correct?

21 A. That is correct.

22 Q. You are not an expert or don't  
23 intend to offer yourself as an expert in  
24 what the DEA regulations actually mean,  
25 correct?



1

2           A.     That is correct.

3

4           Q.     You do not intend to offer  
5           yourself as an expert in what DEA  
6           registrants should or are supposed to do in  
7           accordance with those guidance and  
8           regulations, correct?

8

9           A.     That is correct.

10          Q.     And from a big picture level, if  
11          I understand your report correctly, what  
12          you have done is offer -- is do analyses  
13          offering 16 different metrics and  
14          illustrate what the results of those  
15          metrics would show at a high level.

16                   Do you agree with me that that's  
17          what your report does?

18          A.     Yes. I didn't actually count how  
19          many metrics, so I'm taking your word that  
20          there are 16.

21          Q.     I will represent to you that I  
22          count 16. But what I'm trying to parse  
23          out, I don't mean to be mysterious, is I  
24          want to make sure that I understand the  
25          expertise you do intend to offer and the  
26          expertise you don't intend to offer.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

So as I understand your opinions,  
they are opinions from a data science point  
of view that say if you ran these metrics,  
here's what the results would look like.

Is that a fair assessment at a  
very, very high level?

MS. CONROY: Objection.

You can answer.

A. I would say that's a fair  
assessment. I was asked to apply the  
compliance metrics to the labeler's data,  
including chargebacks and IMS, IQ, yeah.

Q. And you don't intend to offer any  
opinions about which one of those metrics  
is the right one, do you?

A. That is correct. I don't endorse  
any of the metrics or not endorse.  
Agnostic would be the correct term, yeah.

Q. Okay. And you're not going to  
offer any opinions that a particular  
registrant should have or is required to  
employ which ones of the metrics? That is  
not what you were retained to do, correct?

A. That is correct.

1

2           Q.    And that is beyond your expertise  
3    to do.

4                   Do you agree with that?

5           A.    That is correct.

6           Q.    And I think, if I'm reading your  
7    report correctly, you don't take any  
8    opinion as to what the DEA or the  
9    Controlled Substances Act means when it  
10   talks about suspicious orders.

11                   You are not taking a position as  
12   to what specifically the DEA means, right?

13          A.    Yes, I believe that's right.

14          Q.    And I think it can make our day  
15   easier if I understand the scope of this.

16                   What you have done is you've used  
17   a number of different metrics to show that  
18   if a particular defendant had looked at the  
19   data this way, this is what that defendant  
20   would have seen.

21                   Is that fair?

22          A.    Yes.

23          Q.    And when you use the term  
24   "suspicious," which you do quite a number  
25   of times in your report, what you mean by

1

2       that is the result of your own metrics,  
3       right?

4             A.    Yes, you can characterize it that  
5       way.

6             Q.    You don't mean to use  
7       "suspicious" as a technical term meaning  
8       suspicious under the Controlled Substances  
9       Act, right?

10            MR. LEDLIE: Object to the form.  
11            You can answer.

12            A.    Yes, when I say "suspicious," I  
13       mean that they have either triggered one of  
14       the metrics, which are -- I'll leave it at  
15       that.

16            Q.    Okay. And you haven't, you  
17       haven't gone -- have you ever met with  
18       anyone from DEA about this case and your  
19       report?

20            A.    I have not met with anyone about  
21       this case or my report from the DEA.

22            Q.    Okay. Why do you hesitate?

23            A.    I have spoken to DEA officials  
24       about the ARCOS data and how to process it,  
25       but clarifying questions of what does an S

1

2 mean and what does this correction number  
3 mean like...

4 Q. Okay. When you have spoken to  
5 the DEA, it has been entirely in the  
6 context of the data itself, correct?

7 A. Absolutely.

8 Q. You've never asked anyone from  
9 DEA, "Do these various metrics make sense  
10 to you"? You've never asked that question?

11 A. Never.

12 Q. And you've never asked anybody  
13 from DEA, "Are these metrics in line with  
14 what DEA expects or requires"? That's  
15 nothing you've ever asked the DEA, correct?

16 A. That is correct.

17 Q. And that wasn't -- the point of  
18 your report is not to say what the DEA  
19 requires, but rather to say what the data  
20 had available for people to look at.

21 Is that a proper simplification?

22 MS. CONROY: Objection.

23 You can answer.

24 A. I would say, yes, it was what  
25 data was available to apply the -- what

1

2 data was available to apply the compliance  
3 metrics and what those metrics would have  
4 revealed.

5 Q. And, again, I think you've  
6 answered this, but I want to be sure.

7 You do not offer the opinion that  
8 any defendant had an obligation to apply  
9 any of the particular compliance metrics,  
10 right?

11 A. That is correct.

12 Q. And it is also beyond your  
13 expertise to opine on what would have  
14 happened in the real world if someone had  
15 applied the metrics? That is beyond what  
16 you are an expert in, correct?

17 MS. CONROY: Objection.

18 You can answer.

19 A. Yes. There is a section in the  
20 report, the small labeler impact section,  
21 that, depending on how this question is  
22 worded, might come in conflict with that,  
23 but that's not the intention.

24 Q. We'll get to that.

25 But just generally, in the small

1

2       labeler impact, in your own words, you  
3       phrase it as a hypothetical, right?

4             A.     Correct.

5             Q.     You aren't suggesting -- the  
6       defendant that's subject to the small  
7       labeler impact is Janssen, correct?

8             A.     Yes, I believe so.

9             Q.     And what you do in that section  
10      is you model, hypothetically, if Janssen  
11      had looked at the data this way, then  
12      hypothetically, orders could have been  
13      stopped, right?

14            A.     That is correct.

15            Q.     But you do not go further in this  
16      report to opine that Janssen had an  
17      obligation to do that or should have done  
18      that or that the DEA expected Janssen to do  
19      that.

20                    That's beyond your expertise,  
21      right?

22            A.     That is beyond, yes.

23            Q.     Okay. And, also, you don't know  
24      or you don't have the expertise to know --  
25      you don't consider yourself an expert in

1

2           DEA reporting requirements, do you?

3           A.    No.

4           Q.    And you don't know what triggers  
5           a reporting requirement for a manufacturer?

6           A.    No.

7           Q.    You don't know what triggers a  
8           reporting requirement for a distributor, do  
9           you?

10          A.    No.

11          Q.    And you don't know what triggers  
12          reporting requirements for pharmacies?

13          A.    No.

14          Q.    It is beyond the scope of your  
15          expertise to opine on what triggers a  
16          reporting responsibility specifically?  
17          That's beyond what you have been asked to  
18          do here, correct?

19          A.    Correct.

20          Q.    And also just to make sure we  
21          narrow in on what your opinions are, you  
22          are not an expert in what DEA does with  
23          suspicious reports? That is beyond your  
24          expertise as well, right?

25          A.    That is correct.



1

2           Q.    And I think there are places in  
3           your report where you talk about orders  
4           that could have been stopped. And I just  
5           want to make sure that I understand the  
6           parameters of what you intend to say about  
7           that.

8                       When you talk about orders that  
9           could have been stopped, you mean from a  
10          data perspective hypothetically, correct?

11          A.    Yes. I mean that the compliance  
12          metrics showed that order or that triggered  
13          that order and so, yes, it could have been  
14          stopped.

15          Q.    So someone, somewhere could have  
16          stopped those orders?

17          A.    Yes, they could have seen it or  
18          stopped it.

19          Q.    But beyond what the data shows,  
20          do you have any opinions whatsoever on how  
21          that would work in the real world?

22                       MS. CONROY: Objection.

23                       You can answer.

24          A.    No, I have no opinions on the  
25          real world.

1

2           Q.    So going back to what we were  
3           talking about, Section 9, in the small  
4           manufacturer impact -- I think I've gotten  
5           it wrong.  It's called...

6                   (Document review.)

7           Q.    Small labeler impact.

8                   You use the term "labeler" and  
9           "manufacturer" interchangeably, correct?

10          A.    I do.

11          Q.    Actually, you just use the term  
12          "labeler"?

13          A.    I think I use the term "labeler."  
14          I think at the beginning of the report, in  
15          the event that we do say "manufacturer," I  
16          always mean labeler because I...

17          Q.    Why do you do that, just out of  
18          curiosity?  Most of the time I hear people  
19          talk about manufacturers.  Why do you make  
20          that distinction?

21          A.    So as I understand it from when  
22          we process the data from the FDA, they call  
23          it the labeler.  So when they say that the  
24          NDC was labeled by that entity, that was  
25          the -- I understand that to be like the

1

2 last person that put that, if you will, a  
3 box together.

4 So I don't know how often that  
5 box was created by somebody else and  
6 labeled by someone else. They might always  
7 be the same. But to be most correct, I  
8 wanted to use the DEA's and the FDA's  
9 terminology. I'm not sure which one, where  
10 that term came from, but I saw that as part  
11 of the data set.

12 Q. And so going back to the small  
13 labeler impact, when you talk about orders  
14 that could have been stopped, you did not  
15 analyze how that would have happened, who  
16 would have stopped the orders, who had a  
17 duty to stop the orders, what would have  
18 had to happen to stop the orders? You  
19 didn't do any of that work, did you?

20 A. Correct.

21 Q. And you certainly don't intend to  
22 opine that Janssen, in particular, should  
23 have stopped those transactions. That is  
24 beyond what you're saying. You're simply  
25 saying it could have happened, correct?

1

2           A.     That is correct.

3           Q.     And really, as you sit here, you  
4     don't even know how Janssen or any other  
5     registrant would actually stop those orders  
6     in practice in the real world? That is not  
7     something that you have ever studied or  
8     know if it would even be possible, right?

9           A.     That's correct.

10          Q.     Okay. So let's go to the  
11     summary. Let me mark your report as  
12     Exhibit 5.

13                     (Keller Exhibit 5, Expert  
14     Analysis of Lacey R. Keller, not  
15     Bates-stamped, marked for  
16     identification, as of this date.)

17     BY MS. LEVY:

18          Q.     Do you recognize what we've  
19     handed you as Exhibit 5?

20          A.     I do.

21          Q.     What is that?

22          A.     That is my report.

23          Q.     How did this document spring  
24     forth into the world? What -- who typed  
25     it? Whose computer was it on? How did it

1

2 get created?

3

A. So it was a collective effort by  
4 my team. So we have folks working on some  
5 of the coding, some of the data loading,  
6 some of the writing. It sits on my  
7 computer, their computers. But all of it  
8 is in my team.

9

Q. And you said there were roughly  
10 six people working under you on your team  
11 to create Exhibit 5?

12

A. Yes.

13

Q. Nobody working above you to  
14 create Exhibit 5?

15

A. Correct.

16

Q. And you communicated with the  
17 lawyers in this case to prepare Exhibit 5,  
18 correct?

19

A. Correct.

20

Q. And what lawyers specifically did  
21 you communicate with in your work in this  
22 case?

23

A. I'd have to think, but primarily  
24 Linda Singer.

25

Q. Can you think of any other

1

2 attorneys that you worked with other than  
3 Linda Singer?

4 A. Jayne Conroy.

5 Q. Anybody else? Any man attorneys  
6 or just -- did you have an all-women team?

7 A. We're a strong team.

8 Not that I can think of at this  
9 time.

10 Q. And who typed the report?

11 A. The report was primarily typed by  
12 one of my staffers and then myself as well.

13 Q. Just very generally, like what  
14 was the process in writing it? Who did  
15 what in the process?

16 A. Sure.

17 So there's a pipeline. So we --  
18 you know, someone is usually in charge of  
19 loading the data, so bringing it in.  
20 Another person is in charge of the metrics  
21 and applying them. Another person is in  
22 charge of pulling charts, tables and  
23 graphs. And another person is in charge of  
24 making everything look pretty, write the  
25 words. And then it goes and flows up to

1

2 me.

3

And then to the extent that I  
interject myself, either willingly or  
unwillingly from my staff, along each  
different places is how that usually looks.

7

Q. And then did you ever -- strike  
that.

9

For the 16 different analyses or  
the 16 different metrics, those metrics,  
you were asked to run by the attorneys in  
the case? They were not metrics that you  
yourself thought of, correct?

14

A. I would say that is correct. We  
didn't create a metric to the extent that  
multiple distributor was kind of like --  
there was no, "here's how to apply a  
multiple distributor metric." You are just  
looking for whether or not they exist or  
not. Everything else was either created by  
another entity or found by us, if that  
makes sense.

23

Q. So I guess that's what I'm trying  
to figure out.

25

If we look at the index of your

1

2 report, so Exhibit 5, page 2 is the index.

3 And particularly in J, Compliance Metric

4 Application.

5 Do you see -- are you with me?

6 A. I'm with you.

7 Q. The twice trailing 12-month

8 average, which you referred to as the

9 double national average metric, that's a

10 metric that the lawyers in the case asked

11 you to run, correct? You didn't develop

12 that? You didn't think of that yourself,

13 right?

14 A. I would say that's a fair

15 representation.

16 Q. Same is true for the triple

17 national average right below, right? The

18 lawyers asked you to do that analysis; you

19 didn't generate that?

20 A. I would say that's a fair --

21 Q. Same with the McKesson 8,000 rule

22 metric, the lawyers in the case asked you

23 to run that metric; that's not something

24 you thought of on your own, right?

25 A. Correct.



1

2           Q.    The same with the trailing  
3           six-month threshold, which you referred to  
4           as "common sense," that's something that  
5           the lawyers asked you to run.

6                     You didn't come up with that  
7           yourself, right?

8           A.    Correct.

9           Q.    You who came up with the term  
10          "common sense"?

11          A.    I've always heard of that metric  
12          being called that.

13          Q.    That's not your term?  Somebody  
14          else told that to you?

15          A.    That's correct.

16          Q.    And you certainly don't use that  
17          term to mean that it's your opinion that  
18          this is the common sense answer.

19                     That is not how you use that  
20          term, correct?

21          A.    Correct.  It's any one of these  
22          that has quotes in it is -- well, really,  
23          that is the only one that does after the  
24          correction sheet, so, yes.

25          Q.    And is it your opinion that J4,

1

2       the maximum monthly trailing six-month  
3       threshold, is the most common sense in the  
4       ordinary use of that term? That is not  
5       your opinion, is it?

6             A.    That is not my opinion.

7             Q.    Okay. And then No. 5, the  
8       Qualitest, Endo, 25/50 percent national  
9       average, the lawyers in the case asked you  
10      to run that.

11             That was not a metric you came up  
12      with, right?

13             A.    Correct, with a clarification.

14             So on some of the labeler  
15      metrics, some of them were found by  
16      attorneys and some we found on our own by  
17      reading documents.

18             Q.    So that's exactly what I want to  
19      find out.

20             Which ones did you find all on  
21      your own that lawyers didn't ask you to do?

22             A.    I don't know specifically. I  
23      actually didn't keep track. It was kind of  
24      a --

25             Q.    All of the documents that you

1

2       were provided in this case were provided to  
3       you by the lawyers in the case, right?

4           A.    No.   We had access to anything  
5       that we had asked for, and I also could  
6       search for documents.

7           Q.    So what documents -- did you get  
8       any documents that did not come to you  
9       through the lawyers in the case?

10          A.    Yes.

11               MS. CONROY:  Objection.

12       BY MS. LEVY:

13          Q.    And what types of documents were  
14       those?

15          A.    There were a few compliance  
16       documents --

17          Q.    Let me -- I think we might be  
18       talking -- I might be asking the question  
19       in a confusing way.

20               Internal company documents that  
21       you reviewed, those you were given access  
22       to by the lawyers in the case, right?

23          A.    That is correct.  True.  Let's  
24       say relativity.

25          Q.    Okay.  And how did that process

1

2 work? Did you say, I'd like to see  
3 documents of X category, provide them to  
4 me? Or did you search the whole relativity  
5 database and found them on your own? Just  
6 generally, how did that process go?

7 A. A little bit of both. So to the  
8 extent that lawyers had already identified  
9 documents of categories, so we said give me  
10 compliance documents, those would be  
11 already provided to us.

12 To the extent we felt like we  
13 wanted to find more, we'd go looking.

14 Q. Going back to the index of  
15 Exhibit 5, No. J5, this Qualitest, Endo  
16 metric, that was a metric that the  
17 attorneys asked you to run, correct?

18 A. Correct, or that we found.

19 Q. You don't know which?

20 A. I don't. I'm sorry, I don't know  
21 which.

22 Q. And what about No. 6, J6, the  
23 Qualitest, Endo 30,000 rule, that's a  
24 metric that the attorneys asked you to run?  
25 That was their idea, correct?

1

2 A. Or that we found.

3 Q. You just don't know?

4 A. I just don't know. I didn't keep  
5 track.

6 Q. Same with 7, 8, 9, 10, 11, 12,  
7 whose idea was it to run those metrics?  
8 Are these things that you thought of out of  
9 the blue or metrics that the attorneys  
10 asked you to run?

11 MS. CONROY: Objection.

12 A. They're metrics that either the  
13 attorneys asked us to run or that we found  
14 in the compliance documents.

15 Q. And you don't know which?

16 A. I don't know. I mean, I do  
17 remember Mallinckrodt was known at the  
18 beginning, but I don't remember at what  
19 point these we found and others were given.

20 Q. And then for part 1, the  
21 manufacturer prescriber analysis, was the  
22 methodology to look at IQVIA data and come  
23 up with this analysis, was that your idea  
24 or was that something that the lawyers  
25 asked you to do?

1

2           A.     That was what lawyers had asked  
3     me to do. They had asked me to apply the  
4     known compliance metrics to labelers' data  
5     which would have included chargebacks and  
6     IQVIA.

7           Q.     And then for part 2, the  
8     manufacturer to pharmacy analysis, that  
9     also was something that the lawyers asked  
10    you to do; they asked you to apply these  
11    various metrics to chargeback data,  
12    correct?

13          A.     To chargeback data, correct, or  
14    867 data.

15          Q.     What is 867 data?

16          A.     So I want to make sure I get the  
17    definition right because -- so let me flip  
18    to my report.

19                   (Document review.)

20          A.     Sorry, I wish you could do a  
21    control F while you're in the room. It  
22    would make things is so much easier.

23          Q.     Can you do that? I'll see if I  
24    can get Catie to narrow it quickly.

25                   (Document review.)

1

2           A.    No, I can't find the definition.

3           But I understand it to be -- go ahead -- to  
4           be data that the labelers have at their  
5           hands of where their opioids are going down  
6           to the pharmacy level.

7           Q.    Do you know anything else about  
8           867 data or does that reflect your entire  
9           understanding?

10          A.    I mean, I have some backup with  
11          me that I can pull up if you'd like.  But I  
12          don't have a deep, deep knowledge of it.  I  
13          understand just generally definitionally  
14          what it was and then what was provided to  
15          me.

16          Q.    And your understanding of what  
17          867 data is comes from what the attorneys  
18          told you in this case, correct?

19                MS. CONROY:  Objection.

20          A.    I also have a few documents that  
21          are in this list and reading through  
22          depositions of, like, understanding what it  
23          was.

24          Q.    How comprehensive is 867 data?  
25          Who has it and to what extent do they have

1

2           it? Do you know that?

3

4           A. I only know what 867 data I  
5           received. And I believe I only received it  
6           from Purdue, but that -- that at least is  
7           all I've seen.

8

9           Q. Okay. And you didn't do any  
10          analysis on anybody else's 867 data other  
11          than Purdue?

12

13          A. That I was aware of, yes.

14

15          Q. Okay. What is 852 data?

16

17          A. It's just another type of data  
18          that labelers have to them.

19

20          Q. Can you be more specific than  
21          that?

22

23          A. I don't -- I have never seen it,  
24          so I don't know that much about it. But I  
25          understand it to be more of a labeler to  
26          manufacturer.

27

28          Q. What it is, who has it, how  
29          comprehensive it is, all of that is beyond  
30          the scope of your expertise, correct?

31

32          A. For 852 data, yes.

33

34          Q. And 867 data, too?

35

36          A. Correct. I would say I only use



1

2       the data as I saw it and know of that exact  
3       data set and those Bates numbers.

4             Q.     When you used the term -- strike  
5       that.

6                    Chargeback data, you are familiar  
7       with and did a number of analyses on  
8       chargeback data, correct?

9             A.     That is correct.

10            Q.     I am not an expert in data  
11       science, so I'm going to try to get this  
12       right.

13                   But in your backup files, you  
14       have an enormous file with all of the  
15       chargeback data that you were given in this  
16       case, correct?

17            A.     Yes. I think you're referring to  
18       the aggregated, we call it the chargeback  
19       summary table.

20            Q.     And the title of that file is  
21       called chargeback\_flagging, correct?

22            A.     So I think there are two tables.  
23       There's one, the base chargebacks table,  
24       and then that table is used to run  
25       flagging. And when I say "flagging," I

1

2 mean the compliance metrics.

3 Q. The metrics that are reflected in  
4 your report. I tried to print it. It was  
5 so --

6 A. Oh, no.

7 Q. It was very hard.

8 But if I understand -- I've done  
9 some digging in your backup files.

10 You were provided nationwide  
11 chargeback data, correct?

12 A. I think so, yes.

13 Q. And one of the columns in the  
14 enormous amount of data is Buyer County,  
15 correct?

16 A. Correct.

17 Q. And that allowed you to look at  
18 chargeback data by county?

19 A. Yes.

20 Q. So you can isolate a chargeback  
21 in Cuyahoga County or in Summit County,  
22 right?

23 A. Yes, to the best that we could  
24 identify the county, because not all  
25 chargeback data had a county.

1

2 Q. Okay.

3 MS. LEVY: Can we take a break?

4 Thanks. Let's go off the record.

5 THE VIDEOGRAPHER: The time is  
6 10:19 a.m. We are now off the record.

7 (Recess is taken.)

8 THE VIDEOGRAPHER: The time is  
9 10:37 a.m. We are now back on the  
10 record.

11 BY MS. LEVY:

12 Q. Ms. Keller, before the break, we  
13 talked about several data sets, including  
14 ARCOS, A-r-c-o-s, data.

15 To what extent did you use ARCOS  
16 data for your report in this case?

17 A. I believe there is one metric  
18 that required the use of ARCOS data. And  
19 that would be the Qualitest 25, 50.

20 Q. On page 18 of your report?

21 A. 18 to 19, yes.

22 Q. Can you turn with me to page 85  
23 of your report?

24 (Witness complies.)

25 Q. Specifically, paragraph 159. In

1

2 159(b) -- well, let me back up.

3 Page 85 of your report describes  
4 the methodology you followed in this case,  
5 correct?

6 A. To the best that we could, yes.

7 Q. And Section 1 in paragraph 159 on  
8 page 85 describes how you treated six of  
9 the labeler defendants.

10 Do you see that in paragraph  
11 159(b)?

12 A. Yes, table 75.

13 Q. Okay. Table 75 on page 85 shows  
14 how you have grouped particular labels into  
15 combined labeler names.

16 Is that what that table reflects?

17 A. Yes.

18 Q. So how did you come up with these  
19 groupings? What methodology did you use to  
20 come up with these groupings?

21 A. I understood them to be the  
22 subsidiaries or part of the grouped  
23 labeler.

24 Q. And how did you arrive at that  
25 understanding?

1

2

Is that something that the

3

lawyers told you?

4

A. Yes, through our own research,

5

through what the lawyers told us, through

6

corporate filing documents that we had

7

access to, yes.

8

Q. Did you review corporate filing

9

documents in order to come up with these

10

groupings in table 75?

11

A. It was a summary of corporate

12

filing documents. So it was like, you

13

know, for example, this entity and this

14

entity cite this filing document.

15

Q. So you had access to a summary of

16

the corporate groupings in order to come up

17

with table 75?

18

A. I think that would be correct.

19

Q. I don't see that cited anywhere

20

in your report.

21

Where is the cite to whatever it

22

was that you used to come up with these

23

groupings? Where is that summary? Where

24

would I go to find it?

25

A. We could provide that, I guess,

1

2 if it wasn't part of the documents.

3 Q. Who prepared the summary of the  
4 documents that you used to do these  
5 groupings?

6 The lawyers prepared that, right?

7 A. Yes.

8 Q. Basically they told you who to  
9 use and what groupings, right?

10 A. That would be correct, yes.

11 Q. And table 75, it looks like for  
12 purposes of your report, you have assumed  
13 that the labelers in the right-hand column  
14 are subsidiaries of the parents in the  
15 left-hand column; is that correct?

16 MS. CONROY: Objection.

17 A. Yes, I think that's accurate.

18 Q. And so you're assuming that  
19 Allergan, Inc. is a subsidiary of Teva; is  
20 that right?

21 A. Yes.

22 Q. And looking also on table 7 of  
23 your report, which is on, I believe --

24 MR. LEDLIE: 29, I believe.

25 BY MS. LEVY:

1

2 Q. -- page 29.

3 I'm sorry, that is the wrong one.

4 Page 28 of your report, table 6.

5 (Document review.)

6 Q. Are you with me?

7 A. Yes.

8 Q. Okay. In the left-hand column,  
9 it says Parent Company. In the right-hand  
10 column, it has different label names.

11 Do you see that?

12 A. In the right-hand column, it has  
13 different label -- help me out here.  
14 Different than table 77?

15 Q. I'm sorry. Let me reask that in  
16 a less confusing way.

17 Right now I am looking at page 28  
18 of your report in table 6.

19 A. I'm there.

20 Q. Okay. The left-hand column in  
21 table 6 is labeled Parent Company.

22 What does that mean?

23 A. It's like the parent company of  
24 the labelers to the right or how we, I  
25 would say, collectively referred to those,

1

2       that company and its subsidiaries  
3       throughout the report or through -- it's a  
4       way to show who's part of -- when I say,  
5       let's say in table 8, when I say Endo, who  
6       is part of that Endo number.

7               Q.    So in other words, taking the  
8       Endo example, when you refer to Endo, you  
9       are assuming that Endo, Par and Qualitest  
10      are all subsidiaries of Endo, correct?

11             A.    Correct.

12             Q.    And these were assumptions you  
13      were asked to make based on the summary you  
14      were provided? These are not independent  
15      conclusions of your own, correct?

16             A.    Yes. To some extent. I mean,  
17      I've done some research on my own to make  
18      sure that we're getting the odd subsidiary  
19      names, to make sure that those are correct.

20                   And I want to point out that  
21      table 77 is an ARCOS table. The groupings  
22      for the chargeback -- or, I'm sorry, for  
23      the IQVIA table -- I'm sorry. Let me make  
24      sure I'm saying this right.

25                   Table 75, which is where we



1

2           started, that's an ARCOS table.

3                       Table 6 is an IQVIA table.

4           Q.    In both sets of analyses, you  
5           were asked to use the same assumptions as  
6           to whose parent companies go with which  
7           subsidiaries, correct?

8           A.    That's correct.

9           Q.    And those were assumptions that  
10          the lawyers asked you to make, correct?

11          A.    Yeah, or that we knew ourselves,  
12          yes.

13          Q.    Okay.  So looking specifically on  
14          page 28, we've talked about Endo.  I want  
15          to look down at the Teva parent company.

16                       And here, you have listed as Teva  
17          as the parent company and then you have  
18          Actavis, Allergan and Teva as the labelers  
19          that belong with that parent.

20                       Do you see that?

21          A.    I do see that.

22          Q.    Did you do independent analysis  
23          to arrive at that specific grouping or is  
24          that one that the lawyers asked you to  
25          make?

1

2           A.    A little bit of both.

3           Q.    Okay.  What specific independent  
4 analysis did you do to determine that  
5 Allergan is a subsidiary of Teva?

6           A.    We read online documents, some  
7 corporate history of the companies on their  
8 websites.

9           Q.    And who did that work?

10          A.    I reviewed it, as well as another  
11 staff of mine.

12          Q.    And tell me what you know about  
13 the relationship between Allergan and Teva.

14                   What did your research on that  
15 show?

16          A.    I'd have to recall exactly, but I  
17 recall a long history of one -- the company  
18 begetting another and those -- the  
19 corporate history, I would say, is maybe  
20 complicated.

21          Q.    You are not being offered as an  
22 expert in corporate history, I assume?

23          A.    No.

24          Q.    And that is beyond your expertise  
25 or anything that you would be comfortable

1

2       opining on, correct?

3           A.    Yes, that would be correct.

4           Q.    You don't know, as you sit here  
5       today, if Allergan is a subsidiary of Teva?  
6       That is not something that you have  
7       knowledge of?

8           A.    Not that is different than what's  
9       purported in this report, then no.

10          Q.    So I think I need to get more  
11       clarity on that.

12                    You have treated Allergan as a  
13       subsidiary of Teva for purposes of some of  
14       your analyses in this report, right?

15          A.    That's correct.

16          Q.    But as you sit here today, you  
17       don't know if, in actuality, Allergan  
18       really is a subsidiary of Teva? That's not  
19       something that you know, is it?

20          A.    I think that's correct.

21          Q.    And in the ARCOS data and in the  
22       IQVIA data, you recognize from your data  
23       work that Allergan is, in fact, separate  
24       from Teva?

25                    They have different NDC labeler

1

2 codes, correct?

3 A. In ARCOS, they have different NDC  
4 codes. In IQVIA, IQVIA has its own IQVIA  
5 code in there, and so that's assigned by  
6 IQVIA.

7 Q. In the IQVIA data, Allergan is  
8 also different from Teva, isn't it?

9 A. It appears so, yes.

10 Q. All right. So going back to your  
11 report overview on page 16 where you begin  
12 to describe in table 1, the labeler market  
13 shares in Summit County and in table 2, the  
14 labeler market shares in Cuyahoga County.

15 Do you see that?

16 A. I do.

17 Q. And what is the source of the  
18 data that you drew from to create these  
19 market shares? The sources is IQVIA data,  
20 correct?

21 A. That is correct.

22 Q. In this IQVIA data, you could  
23 have separated out the entities that you  
24 believe are subsidiaries of Teva, but you  
25 did not do that, right?

1

2 A. I believe I could.

3 Q. And same for Endo, you could have  
4 separated out the entities that were  
5 subsidiaries of Endo in your view, but you  
6 did not do that, correct?

7 A. Yes. I could break Endo into  
8 Endo generic, Endo labs and Par.

9 Q. And you could break Teva into --  
10 you could break Allergan out from Teva as  
11 well? That's something else you could have  
12 done?

13 A. I could break Allergan, Teva -- I  
14 could break Allergan and Teva out from  
15 Teva.

16 Q. And what would, for example,  
17 Allergan's market share have been if you  
18 had broken it out in table 1 in Cuyahoga  
19 and Summit?

20 A. I'd have to run that number.

21 Q. You've never run that?

22 A. I don't think so, no.

23 Q. Okay. And the same is the true  
24 for the other subsidiaries that you've  
25 wrapped into the parents, you've never run

1

2           them separately, correct?

3           A.     That is correct.

4           Q.     And the reason you didn't is  
5           because you were asked to assume these  
6           groupings and to present the data this way;  
7           is that right?

8           MS. CONROY:  Objection.

9           A.     Yes or from our own  
10          understanding.  Yes.

11          Q.     Well, that's what I want to know.  
12          Which one was it?

13                 With Allergan specifically,  
14          because that's my client, were you asked to  
15          group it with Teva or did you independently  
16          decide to do it that way?

17          A.     I would say it would be most  
18          correct to say that we had grouped them  
19          from doing this for a long time and that it  
20          was agreed upon that that was okay.

21          Q.     Okay.

22          A.     So the data doesn't come that  
23          way.  I have to process it and do the  
24          groupings.  We presented the groupings.  We  
25          continued with those groupings as agreed

1

2       upon.

3

Does that help?

4

Q.   And so when you talk in table 7,

5

for example, about Allergan and you do

6

break it out for table 7, what is the

7

difference there in Allergan and Teva?

8

What Allergan products?

9

A.   I'm sorry, table 7?

10

Q.   I'm sorry, my fault. Let me

11

reask the question.

12

Table 6. I keep saying 7, but

13

it's table 6.

14

In table 6 on page 28, what I

15

really would like to understand is what you

16

understand the difference between Allergan

17

and Teva in that table?

18

A.   So for that table, I think there

19

were -- the purpose of this table is to

20

show compliance metrics over time, and so

21

there were differences over time.

22

And so to the extent that we

23

could help show that granularity, that was

24

the purpose of breaking them apart.

25

Q.   But you didn't ask -- you

1

2       didn't -- you were not asked to and you  
3       didn't look specifically at Allergan?

4               MS. CONROY: Objection.

5               A.    As far as we were presenting  
6       results, let's say, ala, table 1 and 2,  
7       correct.

8               Q.    Now beginning on page 16 in  
9       Section J, you describe your compliance  
10      metric application.

11              Are you with me?

12              A.    Yes.

13              Q.    And you state in paragraph 51, "I  
14      was instructed by counsel to apply metrics  
15      derived and used by any manufacturer or  
16      distributor and also to apply metrics  
17      applied in enforcement actions, McKesson  
18      and Masters, to all data sets to detect  
19      prescribing and purchasing patterns of  
20      unusual size, frequency and pattern."

21              Do you see that?

22              A.    I do.

23              Q.    When you say "I was instructed by  
24      counsel," who does that refer to? What  
25      counsel?



1

2           A.     That would refer to Linda Singer.

3

4           Q.     And so when we talk about  
5     counsel, it's Linda Singer who asked you to  
6     do these various metrics that we are going  
7     to talk about in a minute?

7

8           A.     Linda Singer provided us with the  
9     assignment, yes.

9

10          Q.     In No. 1 -- well, this term that  
11     is used in the end of paragraph 51,  
12     "patterns of unusual size, frequency and  
13     pattern" and there is a cite there, what is  
14     that cite? Do you know?

14

15          A.     I understand that to be the Code  
16     of Federal Regulations when it comes to  
17     diversion, but I'd have to have the actual  
18     language in front of me to know.

18

19          Q.     I don't mean to give you a memory  
20     quiz on the cites. That is not the purpose  
21     of the question.

21

22                 There are no specific  
23     requirements for how a registrant is  
24     supposed to calculate patterns of unusual  
25     size, frequency, and purchasing patterns of  
26     a -- sorry, let me ask the question again.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

You are not aware of any specific rules or regulations for a registrant on how to calculate patterns of unusual size or frequency, correct?

A. So I think, as I stated earlier, that's not my area of expertise.

Q. And you're not aware of any?

A. I wouldn't be able to say, but...

Q. Okay. The first metric that you employ is double the national average. And I'm looking now on page 17.

A. Correct.

Q. Are you with me?

And that metric, again, was one that Linda Singer asked you to do, correct?

A. Correct.

Q. And you didn't find it in any DEA regulations?

A. Correct.

Q. You are not aware of any place in the real world where this metric is used, correct?

MS. CONROY: Objection.

A. I wouldn't know for sure.

1

2 Q. Do you have a guess?

3 MS. CONROY: Objection.

4 A. No.

5 Q. Okay. And you are -- I think you  
6 already answered this earlier, but you are  
7 not offering any opinion that this metric  
8 is somehow a requirement on registrants,  
9 right? That is not your opinion?

10 A. Correct. That's not my area of  
11 expertise.

12 Q. And you are not offering an  
13 opinion that failure to employ this metric  
14 is somehow unlawful or misconduct?

15 That is beyond your expertise,  
16 correct?

17 A. Correct.

18 Q. Going to the second metric that  
19 you applied, triple national average,  
20 again, that metric you were asked to run by  
21 Linda Singer, correct?

22 A. Correct.

23 Q. That did not come from any DEA  
24 guidance or any DEA regulations, correct?

25 A. Correct.

1

2           Q.    You do not know of any place in  
3           the real world that applies that average,  
4           correct?

5                   MS. CONROY:  Objection.

6           A.    I wouldn't know.

7           Q.    And it is not your opinion that  
8           any registrant should have or had any  
9           requirement to employ that metric in the  
10          real world?  That is not the opinion you're  
11          offering in this case, correct?

12          A.    Correct, that's not my area of  
13          expertise.

14          Q.    Looking at No. 3, the McKesson  
15          8,000 rule, again -- I apologize if this is  
16          getting tedious.  The McKesson 8,000 rule  
17          is a metric that you are asked to apply by  
18          Linda Singer, correct?

19          A.    Correct.

20          Q.    And you were asked to look at  
21          what would the data show if you used this  
22          set of assumptions, right?

23                   MS. CONROY:  Objection.

24          A.    Yes.

25          Q.    Like No. 1 and 2, the McKesson

1

2       8,000 rule is not a metric that you have  
3       ever seen in any DEA guidance or  
4       regulation, correct?

5           A.    I think that's correct.

6           Q.    Are you aware of any limitation  
7       anywhere in the DEA regulations or in the  
8       Controlled Substances Act or any guidance  
9       interpreting them that puts a specific  
10      limitation on dosage units?

11           MS. CONROY:  Objection.

12           A.    I would say that's outside of my  
13      expertise.

14           Q.    And it is not your opinion in  
15      this case that any particular defendant was  
16      required or obligated to employ this metric  
17      in running its business, correct?

18           A.    That's correct.  That's outside  
19      of my expertise.

20           Q.    Even with respect to McKesson, it  
21      is outside your area of expertise to say  
22      that anybody, McKesson or anybody else, had  
23      a duty to run a metric in the way that you  
24      have, right?

25           A.    Yes, I believe that is correct.

1

2           Q.     Going down to No. 4, Maximum  
3     Monthly Trailing Six-Month Threshold, which  
4     in parentheses says, quote, "common sense."

5                     I think you told me this before  
6     the break, common sense is not a term that  
7     you came up with, right?

8           A.     Correct. I've heard this rule  
9     referred to colloquially as the common  
10    sense rule.

11          Q.     Who have you heard that  
12    colloquially? Who has referred to this  
13    rule as the common sense rule?

14          A.     I honestly couldn't remember.  
15    It's been -- I've heard it so many times  
16    that I --

17          Q.     Had you heard it from lawyers in  
18    the case?

19          A.     Sure.

20          Q.     Have you ever heard it from DEA?

21          A.     No. Like I said, I only spoke to  
22    the DEA about the ARCOS data.

23          Q.     Okay. And it is not your opinion  
24    in this case that this metric is the most  
25    sensible metric? Even though the term

1

2       might suggest that, that's actually not  
3       your opinion in this case. Am I right  
4       about that?

5             A.     That's correct.

6             Q.     Okay. Have you read the Masters  
7       Pharmaceutical opinion from the D.C.  
8       circuit in 2017?

9             A.     I think I skimmed it a while ago.

10            Q.     You don't intend to offer any  
11       opinions about what the law is as a result  
12       of that opinion, correct?

13            A.     That's correct.

14            Q.     And you don't intend to offer any  
15       opinions as to what the law might require  
16       as a result of that opinion, do you?

17            A.     That's correct.

18            Q.     Okay. Sorry, back to the common  
19       sense threshold. That is not a threshold  
20       that came from -- where did that threshold  
21       come from?

22            A.     Do you mean where was the metric  
23       derived or?

24            Q.     Yes. Where was metric derived?

25            A.     So I have it -- whatever citation

1

2 I have there, that's where it would have  
3 been derived from.

4 Q. And beyond that, you don't know  
5 anything other than you were asked to run  
6 it, correct?

7 A. Yeah, I was asked to review the  
8 metric and implement it on the data.

9 Q. With respect to the Qualitest  
10 Endo 25/50 percent national average, that  
11 metric also came -- that metric was  
12 presented to you by the attorneys as  
13 something that you should run based on  
14 documents that you were provided, correct?

15 A. It was either a metric that we  
16 found or the attorneys provided. I  
17 honestly can't remember.

18 Q. And for this metric, which was  
19 it? Did you stumble across a document and  
20 say, hey, we should run this? Or did the  
21 attorneys provide you documents and say  
22 based on these documents, we'd like for you  
23 to run it as if this were the law of the  
24 land?

25 MS. CONROY: Objection.



1

2           A.    I'd really have to review my  
3           notes to know for sure.  I don't remember.

4           Q.    Okay.  And you don't recall  
5           seeing this metric in any directive from  
6           DEA or any guidance from DEA?  That's not  
7           your opinion in this case?

8           A.    That's correct.  I don't recall  
9           seeing it in any guidance, nor is it my  
10          opinion to offer.

11          Q.    And I think, to short-circuit  
12          this, if we look at page 19, 20, 21, and 22  
13          of your report, those list other metrics  
14          that you were asked to run, correct?

15          A.    Yes.  I would say I was asked to  
16          review the documents, interpret the metrics  
17          and run them on the data.

18          Q.    You will not offer any opinion in  
19          this case as to whether these metrics are  
20          appropriate for a registrant to do in real  
21          life, whether a registrant should have done  
22          them or had any requirement to do them in  
23          real life?  That is outside of the scope of  
24          the opinions you intend to offer in this  
25          case, correct?

1

2 A. Correct.

3 Q. With respect to every one of the  
4 metrics that are listed in 19 through 21 of  
5 your report, you have no opinion as to  
6 whether there was a duty to do them,  
7 whether it was feasible in the real world  
8 to do them, or what the result would have  
9 been had a registrant attempted to  
10 implement these metrics?

11 All of that is beyond the scope  
12 of what you have been asked to opine on,  
13 correct?

14 MS. CONROY: Objection.

15 A. So I would say all the metrics in  
16 17 through 22, so all of them that we've  
17 covered today and that are in the report, I  
18 would not be offering that opinion,  
19 correct.

20 Q. Okay. Let's go to page 23,  
21 Manufacturer to Prescriber Analysis.

22 Table 4 reflects your work with  
23 IQVIA -- is that how you pronounce it? How  
24 do you say it?

25 A. I say IQVIA.

1

2 Q. IQVIA.

3 A. I've heard it IQVIA. I've heard  
4 it all. I'm from Kansas. I'm not super  
5 good at pronouncing words.

6 Q. Me either.

7 A. We said Par-mee-zian cheese for a  
8 long time --

9 Q. Really?

10 A. -- instead of Parmesan.

11 Q. Parmesan.

12 IQVIA, I say it both ways.

13 You looked at that set of data  
14 and based on your data analytics, you  
15 grouped prescribers by specialty and the  
16 results of that work is reflected in table  
17 4; is that right?

18 A. Yes. And the groupings are in  
19 the methodology.

20 Q. Now your report suggests that you  
21 were missing data for 2017, right?

22 A. For 2007.

23 Q. I'm sorry, for 2007.

24 So your analyses skipped 2007; is  
25 that right?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. Yes, it does not include 2007, which would only increase any of the numbers or -- depending on the metrics, either increased the number of transactions or might impact this.

Q. Do you know whether the 2007 data is actually missing or whether it's actually in your reliance materials but just in a different format than the rest of the years? Have you looked at that issue?

A. So I actually just -- we just found this out this week that the 2007 data is in the production and the reliance materials that we listed. It was in such a different format in function, and we were provided no data dictionary on how to process it, that we didn't feel comfortable with including it because it didn't look like any of the other years.

We weren't quite sure if it was a secondary file because we just had the Bates number and nothing, like, else to process it. So we felt that it was most conservative to leave it out as opposed to

1

2       maybe including some data erroneously.

3               Q.    Okay.  That's what I thought you  
4       would say.

5                   Does anything that you have  
6       subsequently seen in the 2007 data change  
7       your report or your opinions in any way?

8               A.    So to be honest, we're still  
9       loading that data.  But I would say that it  
10      wouldn't because all it would do is just  
11      create a bigger base on which to run  
12      that --

13              Q.    And just really fill in the gap  
14      of that one year in a 20-year period that  
15      you didn't have hard data and had to  
16      extrapolate, right?

17              A.    Correct.  And I would say there's  
18      some metrics that have a lookback period  
19      that are somewhat impacted by that lack of  
20      data because you can't employ those when  
21      you're missing a year of data, so those  
22      would be impacted.

23              Q.    Do you have any present intention  
24      to create a supplemental report in this  
25      case?

1

2           A.    I don't know.

3           Q.    Do you have a supplemental report  
4   in process?

5           A.    No.

6           Q.    Okay.  And if your opinions  
7   change in any way as a result of additional  
8   analysis of the 2000 [sic] data or for any  
9   other reason, we would ask that you bring  
10  that to the attention of counsel.

11          A.    Of course.

12          Q.    Okay.  Page 27 of the report,  
13  paragraph 76, heading No. 1 at the top of  
14  page 27.

15                   Are you with me?

16          A.    I am.

17          Q.    It says, "Defendant access to  
18  IQVIA data."

19                   And then down in paragraph 78 you  
20  make the statement that "Each of the  
21  defendant labelers had access to IQVIA  
22  XPONENT data."

23                   Do you see that?

24          A.    I do.

25          Q.    That is an assumption that you

1

2       were asked to make. You did not look at  
3       each labeler and do an analysis of what  
4       data each labeler had during what time  
5       periods in the real world? You did not do  
6       that, did you?

7             A. I would say it's a mix.

8             Q. Okay.

9             A. It was an assumption that we made  
10       at the beginning of the report. But we  
11       also, in part of the reliance materials  
12       that are provided to you today, also  
13       include dates in which we identified  
14       defendant access to -- defendant labeler  
15       access, I should be more specific, to the  
16       IQVIA XPONENT data or purchase. I should  
17       say purchase, not access.

18            Q. So let's go through on page 28 in  
19       table 6.

20                   For Endo, did you an analysis of  
21       what IQVIA data Endo had in its files, what  
22       type of IQVIA data Endo actually had, and  
23       for what years in the 20-year time period  
24       that you looked at? Is that something that  
25       you did?

1

2           A.    I would say yes.

3           Q.    Okay.  And what is the answer for  
4   Endo?

5           A.    I'd have to pull up my files to  
6   look specifically.

7           Q.    You don't know?

8           A.    I don't remember, no.

9           Q.    Okay.  Do you know -- can you  
10   say, as you sit here, are you going to give  
11   the opinion that Endo actually had the full  
12   set of IQVIA data in its files for the  
13   whole 20-year period?  Is that an opinion  
14   you intend to offer in this case?

15          A.    So I would say it's an assumption  
16   of the report but not an opinion, yes.

17          Q.    Okay.  And so I just want to --  
18   I'm not trying to be tricky.  I'm looking  
19   at the first statement in 78.  You say,  
20   "Each of the defendant labelers had access  
21   to IQVIA XPONENT data."

22                   What you mean by that is they  
23   could have purchased that data, right?

24          A.    I would say that's correct, if  
25   they didn't already purchase some form of



1

2       it, yes.

3           Q.    And in -- some of the labelers or  
4       some of the defendants in this case might  
5       have purchased some data for some time  
6       periods. And you do not know and did not  
7       do a deep analysis of every single labeler,  
8       every single time period? You didn't do a  
9       look at what each labeler had in the real  
10      world, right?

11           A.   We had a -- we had a high level  
12      review, but I couldn't write a report on  
13      each labeler's access on every year, no.

14           Q.   And the metrics that you run that  
15      flow from the IQVIA data are based on the  
16      assumption that any of these labelers could  
17      have had it all, but not assuming that they  
18      actually did have it all in the real world?

19           A.   Yes.

20           Q.   And --

21           A.   When you say "it all," I would  
22      say -- I want to clarify that, if you're  
23      saying that the Allergan data is it all. I  
24      don't know what the "all" could be from  
25      IQVIA. You know, I know only what Allergan

1

2 had produced. So to that extent.

3

Q. And so when you're talking about  
4 what Allergan produced, let's look at -- I  
5 think I know what you're referring to, but  
6 I want to make sure we're clear. It's  
7 footnote --

8

A. Actually I think it's in that --

9

Q. I think it's on page 28 and  
10 footnote 81 in your report.

11

When you talk about the data that  
12 Allergan produced, is that what you're  
13 referring to?

14

A. Yes. When I talk about the IQVIA  
15 data that we're using throughout the  
16 report, that was the Bates number given to  
17 me for that production.

18

Q. And you have no idea whether  
19 Allergan had that data in its possession  
20 during the time period you're analyzing  
21 between 2000 and -- or 1997 and 2017?

22

You don't know whether Allergan  
23 had that body of data then or purchased it  
24 later like for litigation? You don't know  
25 that, do you?

1

2           A.    I would not know that, no.

3

4           Q.    Okay.  And so you're not

5           assuming -- let me phrase it differently.

6

7           Strike that.

8

9                   When you say in paragraph 78 that

10

11           each of the defendant labelers had access

12

13           to IQVIA data, you mean had access to the

14

15           data that is referred to in 81, the

16

17           footnote?

18

19                   MS. CONROY:  Objection.

20

21           A.    I would say they could have had

22

23           access to the data referred to in footnote

24

25           81.

26

27           Q.    And you've drawn the exact

28

29           distinction that I'm trying to hone in on.

30

31                   They could have had access.  You

32

33           don't know and you did not analyze on a

34

35           labeler-by-labeler basis who did have

36

37           access to it and specifically when they had

38

39           access to it and specifically which piece

40

41           of footnote 81 that each labeler had access

42

43           to?  You did not drill down and look at the

44

45           minutia of that, did you?

46

47           A.    I would say some of the reliance

1

2       that I've read today does look at that, but  
3       not every year for every labeler. It  
4       goes -- it reviews -- I don't even want to  
5       the say what percentage, but we did look at  
6       a high level to make sure. Or I would say  
7       the materials that we've provided to date  
8       will reflect, let's say, purchase orders  
9       from Purdue for several years of Xponent  
10      data and reveal -- and show what data or  
11      what baskets of data, I think is what they  
12      referred to them, might have been included  
13      as part of that purchase.

14             Q.    I think I understand.

15                    You have seen documents that  
16      reflect some purchases in some time periods  
17      of some Xponent IQVIA data, right?

18             A.    Correct.

19             Q.    You cannot say for Allergan what  
20      data Allergan had in what time period.  
21      That's not something you can do, right?

22             A.    If it's in the reliance, then I  
23      could. But other than that, no.

24             Q.    Gotcha.

25                    All you know about who had what,

1

2           when is what is in your reliance materials?

3           A.     Correct.

4           Q.     And for the Allergan data that  
5           you referred to in footnote 81, you do not  
6           know when that data was acquired or what  
7           portion of that data was received during  
8           the 20-year time period by Allergan or any  
9           other defendant in this case?

10                    You only know snippets from other  
11           documents; is that right?

12                   MS. CONROY:  Objection.

13           A.     Yes, I have documents that show  
14           purchases.  Again, I don't have that data  
15           from that time provided to me.

16           Q.     Okay.  I think I understand.

17                   And the thing I'm getting at, to  
18           demystify it, is you are not offering any  
19           opinions that the defendants in this case  
20           actually had all this data in their hands.

21                   Your opinion is, if they had it  
22           and if they looked at it in the way I did,  
23           here's what the metrics would have shown.

24                   Do you see the distinction I'm  
25           drawing?

1

2           A.    I think I see the distinction.

3           If we're talking about IQVIA, chargebacks,  
4           they of course had.

5           Q.    Okay. And you agree with me if  
6           we are talking about IQVIA? We'll talk  
7           about chargebacks in a minute. Am I right?

8           A.    I think so.

9           Q.    Okay. Let's look at page 30 of  
10          your report.

11                   (Witness complies.)

12          Q.    Page 30 in table 9. In table 9,  
13          you take four of the metrics and show a  
14          summary of what it would look like if these  
15          metrics would have been run, correct?

16          A.    Yes. We show what number of  
17          prescriptions would have been flagged by  
18          the compliance metrics if they were run,  
19          yes.

20          Q.    And when you say in the  
21          right-hand column any flag, again, this is  
22          depending on the metrics, you get different  
23          numbers.

24                   If you use double national  
25          average, you get a different number from

1

2       triple national average, from McKesson  
3       8,000, and from common sense.

4               Each of these metrics generates a  
5       different number of flags, right?

6           A.    Correct.

7           Q.    You do not intend to offer any  
8       opinion in this case as to which one of  
9       these is right. I think you've told us  
10      that, correct?

11          A.    Right.

12          Q.    And relatedly, you don't intend  
13      to offer any opinion that any particular  
14      set of these prescriptions are suspicious  
15      prescribing as the DEA would define it?  
16      That is not what you're here to do,  
17      correct?

18          A.    Correct. Whenever we use the  
19      word "suspicious," we mean that it tripped  
20      one of the metrics.

21          Q.    When you use the term  
22      "suspicious," you mean flagged by your  
23      metrics?

24          A.    That's precisely what we mean.

25          Q.    And that is all that you mean by

1

2           that?

3                   A.     Correct.

4                   Q.     And so under your metrics, in  
5           table 10, we can see the number of  
6           physicians in Summit and Cuyahoga County  
7           who would have been flagged by the  
8           compliance metrics that you use, right?

9                   A.     Correct.

10                  Q.     And depending on which metric you  
11           use, your metrics would generate thousands  
12           and thousands of physicians in these two  
13           counties who get flags, right?

14                  A.     I would say they're not my  
15           metrics, but by applying these metrics,  
16           yes, you would have.

17                  Q.     And I think I know the answer  
18           now, but you are not suggesting that there  
19           are actually, looking at the first row,  
20           4,207 family or general physicians in  
21           Summit and Cuyahoga County that are  
22           actually prescribing suspiciously? That is  
23           not what you mean to suggest here, correct?

24                  A.     Correct. What I mean to say is  
25           that they were -- they tripped one of the



1

2 compliance metrics.

3

Q. Okay. And in figure 2, figure 2  
4 reflects what the dosage unit numbers look  
5 like between some really tiny colorful  
6 chart on the bottom left-hand side.

7

I think the orange chart at the  
8 top is the dosage units reflected by any  
9 flagged prescription of any of your  
10 compliance metrics.

11

You see the orange one on top?

12

A. It's black and white, but...

13

Q. Oh, I'm sorry about that. You  
14 see the line at the top?

15

A. I think it is orange. The top  
16 one mathematically should be any metric.

17

Q. Okay. And, again, when we're  
18 looking at these, this is not information  
19 that you are suggesting that the labelers  
20 actually had, correct?

21

A. Yes. I'm saying that they could  
22 have had.

23

Q. Could have had.

24

And this is not -- you're not  
25 opining on anything that the labelers could

1

2 have or should have done with this data?

3 That is not what you're offering here?

4 A. It's a little confusing. The  
5 whole analysis is if they had applied, this  
6 would be the results.

7 But I am not saying that they  
8 should have. That would not be my expert  
9 opinion.

10 Q. Okay. And you say in paragraph  
11 82 that you've done a diligent search and  
12 you haven't seen any labelers reporting any  
13 of these physicians to law enforcement.

14 Do you see where it says that in  
15 82?

16 A. Correct. I do see that.

17 Q. My question is: What was the  
18 diligent search that you describe there?

19 A. So we were reviewing --  
20 specifically, especially for the examples  
21 in the report, searching for their names,  
22 for documents within the production for  
23 those names would be one example of how we  
24 did that search.

25 Q. Flip with me to page 32 of your

1

2 report, table 11.

3 A. Yup.

4 Q. In your prior answer when you say  
5 "those names," you're referring to the  
6 physicians that are listed in table 11,  
7 right?

8 A. The physicians in table 11, as  
9 well as any exemplar physicians in the  
10 report. I think Yang is the only one  
11 that's not part of table 11.

12 Q. Why is he not in table 11?

13 A. So from what I -- so table --  
14 this is very confusing for people and I  
15 apologize.

16 These -- the intention of table  
17 11 was to identify the physicians that  
18 labelers had documented somewhere that were  
19 suspicious. They said either for Purdue,  
20 for example, that would be your do-not-call  
21 list regency rule. I could not find Yang  
22 on those documents.

23 Q. But you don't know, as you sit  
24 here today, whether these doctors were  
25 actually reported to authorities? You

1

2 don't know that one way or the other?

3 A. I would say I don't know that one  
4 way or the other.

5 Q. Okay. And you don't know if  
6 authorities actually investigated these  
7 guys? That is beyond what you would know,  
8 correct?

9 MS. CONROY: Objection.

10 A. To the extent that there isn't  
11 news articles. I mean, I think I do cite  
12 some news articles about some of these  
13 doctors, so I would assume an arrest -- or  
14 there was an investigation leading to an  
15 arrest.

16 Q. Other than the public  
17 information, you don't have any knowledge  
18 about investigations that might or might  
19 not have gone on about these physicians,  
20 correct?

21 A. Correct.

22 Q. And you did not take a look at  
23 what proportion of these doctors'  
24 prescriptions were lawful versus unlawful?  
25 That is not something that you were asked

1

2 to do here?

3 A. Correct. I would not know what  
4 was lawful versus unlawful.

5 Q. Okay. And did you talk to  
6 anybody at DEA and ask if these doctors  
7 ever were on DEA's radar screen or what  
8 they knew about these doctors and when?

9 A. No. Like I said earlier, the  
10 only contact I've had with the DEA is just  
11 to talk about our ARCOS data process.

12 Q. And turning to page 33 of your  
13 report, figure 3, for one of those  
14 prescribers, this is an illustration of  
15 Dr. Sinoff's dosage units compared to other  
16 physicians in his specialty between '97 and  
17 2017.

18 Is that what this chart reflects?

19 A. Yes.

20 Q. The limit of your opinion is: If  
21 the metrics I employed had been used, this  
22 is what they would show, correct?

23 A. I would say that there were -- to  
24 make this graph "no metrics needed to be  
25 applied," I just graphed the IQVIA data for

1

2       this prescriber.

3

4           Q.   Well, you had to figure out a  
5       national average, you had to figure out  
6       what specialty, isolate the specialty,  
7       create an average, and then run the metric,  
8       right?

9

10          A.   Yes, I did have to calculate an  
11       average for that specialty for that year.  
12       But then as far as flagging, that would be  
13       recorded in a separate table.

14          Q.   Looking at figure 3, you're not  
15       going to offer any opinions as to, you  
16       know, whether a labeler should have sliced  
17       the data or looked at the data this way?

18                The "should have done" or  
19       "required to do" is beyond your opinion,  
20       correct?

21          A.   Correct.

22          Q.   You are not intending to offer  
23       any opinions as to what point in the  
24       timeline reflected in figure 3 a labeler  
25       might have a reporting duty with respect to  
26       this doctor, correct?

27                That's beyond the scope of what

1

2       you have expertise to do?

3             A.     Correct.

4             Q.     You don't intend to offer any  
5       opinions as to what might have happened if  
6       someone reported Dr. Sinoff to someone  
7       else, what might have happened in the real  
8       world if that had happened? That is beyond  
9       what you will offer in this case, correct?

10            A.     Correct.

11            Q.     Somewhere in the report you  
12       conclude by using a phrase "that orders  
13       might have been stopped."

14                    You haven't looked at and you  
15       don't know the process by which orders get  
16       stopped, do you?

17            A.     Not thoroughly, no.

18            Q.     Okay. And you don't have the  
19       expertise to offer opinions about how a  
20       distributor or a manufacturer or a pharmacy  
21       would stop an order? That is not -- that  
22       is beyond the limits of your expertise,  
23       correct?

24            A.     Correct.

25            Q.     Okay. And for each of the

1

2 doctors that are analyzed in pages 32  
3 through 52 of your report, again, your  
4 opinions offered at trial will be limited  
5 to this is what the data could have shown,  
6 but you do not intend to offer any opinions  
7 as to what should have been done, what was  
8 required to be done, or what would have  
9 happened in the real world had an action  
10 been taken, correct?

11 A. That's correct.

12 Q. Okay. Page 54 of your report in  
13 paragraph 115 -- sorry. Let me back up.

14 Page 53 gives us the heading  
15 "Small Labeler Impact."

16 We talked a little bit about this  
17 analysis before the break, correct?

18 A. Correct.

19 Q. I believe you agreed with me that  
20 the small labeler impact analysis is  
21 hypothetical only, correct?

22 A. Yes, hypothetical only.

23 Q. You do not intend to offer any  
24 opinions that this analysis should have  
25 been done by Janssen or anyone else,



1

2 correct?

3 A. Correct.

4 Q. You have no idea how many opioids  
5 went into Cuyahoga and Summit County, how  
6 many of those opioids were excessive versus  
7 medically necessary? You have no idea of  
8 that, do you?

9 A. That's outside of my expertise,  
10 correct.

11 Q. Okay. And you do not intend to  
12 offer any opinions in this case that the  
13 actions of any manufacturer would have or  
14 could have prevented excess orders into  
15 Cuyahoga and Summit County? That is beyond  
16 your expertise?

17 MS. CONROY: Objection.

18 A. Sorry, I think so, yes. I would  
19 say throughout the report, we say if they  
20 had used the compliance metrics, they could  
21 have been identified, but nothing about  
22 should.

23 Q. And when you say "could have had  
24 a curtailing affect on the excess of  
25 opioids prescribed in the counties," do you

1

2       see where it says that in 115?

3             A.    Yes, I'm there.

4             Q.    That is hypothetical only.  You  
5       do not know whether there was, in fact, an  
6       excess of opioids or to what extent the  
7       opioids in Cuyahoga or Summit County were  
8       excessive?  That is not something you know,  
9       correct?

10            MS. CONROY:  Objection.

11            A.    Correct.

12            Q.    And you don't know and it would  
13       be outside of your expertise to know how or  
14       whether Janssen's actions could have  
15       curtailed that and to what extent excessive  
16       prescribing could have been curtailed?  
17       That is outside of what you've been asked  
18       to do here, correct?

19            MS. CONROY:  Objection.

20            A.    Outside of what we've offered  
21       here of the hypothetical situation of what  
22       the impact on the prescriptions would have  
23       been, then no.

24            Q.    Okay.  Page 56 and 57 talk about  
25       a baseline year analysis.

1

2 Are you with me?

3 A. Yes.

4 Q. I am not data scientist, so let  
5 me say that. I'm just a lawyer. But I  
6 understand this analysis to be a  
7 supplemental analysis that looks at what  
8 would have been the change to certain of  
9 your metrics if you had used 1997 as a  
10 baseline year as opposed to using the  
11 year-over-year actual averages.

12 Is that a fair simplification?

13 A. That is a fair simplification.

14 Q. Okay. And what you conclude  
15 about that is reflected in tables 30  
16 through 32 on page 57, correct?

17 A. Yes.

18 Q. You do not have any opinion as to  
19 whether it's more appropriate to use '97 at  
20 a baseline year or to use the  
21 year-over-year averages that are reflected  
22 elsewhere in your report.

23 You are not taking a position on  
24 that, correct?

25 A. Correct. It's another

1

2       hypothetical situation.

3               Q.    It's just another option to show  
4       the data, correct?

5               A.    That's a great way to say it.

6               Q.    And then in table 30, table 30  
7       shows the additional physicians that would  
8       have been flagged if you used '97 as the  
9       baseline; is that right?

10              A.    Correct.

11              Q.    And under the, air quote, "common  
12       sense" metric, if you used the '97  
13       baseline, you would have gotten 8,736 more  
14       physicians flagged than if you used the  
15       year-over-year metrics, right?

16              A.    Yes.

17              Q.    You have no opinion on whether  
18       there were really 8,700 suspicious  
19       prescribers in Cuyahoga and Summit County?  
20       You have no opinion whatsoever on that, do  
21       you?

22              A.    Correct.

23              Q.    Okay. Part 2 of your report is  
24       Manufacturer to Pharmacy Analysis.

25                   And this analysis uses chargeback

1

2 data as opposed to IQVIA data, correct?

3 A. Correct.

4 Q. We talked about this before the  
5 break, but you were provided a gigantic  
6 chargeback data file, correct?

7 A. That is not a full  
8 representation.

9 Q. Okay. Sorry. Let me get in your  
10 words.

11 What did you have with respect to  
12 chargeback data?

13 A. I have thousands of chargeback  
14 files that were produced by defendants. So  
15 those are, the Bates for those are in my  
16 report somewhere. And so to create the  
17 massive chargeback file that you're looking  
18 at that you tried to print out, which  
19 probably broke your whole computer, was an  
20 amalgamation of those data sets to make  
21 them processable.

22 Q. And, again, this data science is  
23 too hard for me, but to the extent that my  
24 lawyer brain can understand it, what I  
25 believe you did was you put all of those

1

2 different kinds of files that you received  
3 from different productions of labelers into  
4 a chargeback file, and then you ran the  
5 metrics in various ways and created a file  
6 that's called chargeback\_flagging that's  
7 giant in itself and shows you the times  
8 that the flags hit based on each of the  
9 metrics you ran.

10 Is that essentially what you did  
11 in your analysis?

12 A. Yes. So the process -- and I  
13 actually wrote the chargebacks scripts, so  
14 I can talk a lot about it. And so what it  
15 does, for some labelers, we had like two  
16 files. Mallinckrodt produced two. Those  
17 were just stacked on top of one another and  
18 put into the table.

19 Some had literally thousands of  
20 files that had to be appended onto one  
21 another because they were chunked in such a  
22 way to make them smaller, maybe more  
23 manageable for processing. I don't know  
24 the reasons behind that production. So  
25 those, again, were stacked on top of one

1

2 another.

3

And then relevant fields moved  
4 over into the main chargeback table. So  
5 relevant fields would be date, who they  
6 went to, DEA numbers if they were there, so  
7 on and so forth.

8

Q. And you had the buyer county, so  
9 you could look at it -- you could look at  
10 the flags and your metrics specific to  
11 Cuyahoga and Summit County, correct?

12

A. Yes. So if the county wasn't  
13 provided in the data, some had it, some did  
14 not, we would find that county, either  
15 using ZIP code, buyer DEA, registrant  
16 information. From the ARCOS data, that  
17 would be another touch point for the ARCOS  
18 data. Or through just geolocation, which  
19 would be like a lat/long, latitude and  
20 longitudinal.

21

Q. Part of what a data scientist  
22 does and part of what's reflected in your  
23 invoices is, as I understand it, actually  
24 making the data usable so you can analyze  
25 it, right?

1

2           A.    That's the part they don't ever  
3           tell anybody. That is kind of the un-sexy  
4           part of the job is cleaning the data and  
5           putting it together.

6           Q.    Okay. Looking at page 58 of your  
7           report, part L is where you describe the  
8           results of the analysis that you ran,  
9           right?

10                   And if I understand the process,  
11           you made the data, and it seems like it  
12           wasn't easy, but you made the data usable  
13           and then you ran your metrics over it. And  
14           what is presented in the analysis, similar  
15           to what we talked about earlier, is what  
16           the results would be if these metrics were  
17           run, what your metric show.

18                   Do I have that right?

19           A.    Yes, I would say the data wasn't  
20           unusable, so I don't want to characterize  
21           it that way, but we made it that an  
22           easy-to-flag format. And, yes, we applied  
23           the metrics and here's what the results  
24           were.

25           Q.    And, again, like the other



1

2       analyses we've talked about, you do not  
3       intend to offer any opinions that any  
4       labeler should have done this; is that  
5       right?

6             A.     Correct.  It's a --

7             Q.     You have no opinions as to  
8       whether there was any requirement by any  
9       defendant in this case to do analyses like  
10      you have done here, correct?

11            A.     Correct.

12            Q.     Okay.  What your part L of your  
13      report shows us is merely if the data is  
14      looked at in this way, here's what it would  
15      show.

16                    Do I have that right?

17            A.     I think that is a nice  
18      representation.

19            Q.     Okay.  Paragraph 125 refers to  
20      chargebacks as a -- let me strike that.

21                    Do you see paragraph 125 of your  
22      report on page 58?

23            A.     I am there.

24            Q.     Okay.  In the third sentence  
25      there, you say, "For Mallinckrodt, between

1

2           2009 and 2012, 96 percent of oxycodone  
3           orders and 98 percent of oxycodone 30  
4           orders were subject to chargeback request  
5           and hence would be in the chargeback data."

6                       And then you have a footnote  
7           there.

8                       Do you see that?

9           A.    Yes.

10           Q.   And then you go on to say, "In  
11           2017, Teva stated that about 51 percent of  
12           controlled substance transactions resulted  
13           in a chargeback."

14                       And then you have a cite there.

15                       Is that correct?

16           A.    Yes.

17           Q.   Do you see that?

18                       Okay. The only information that  
19           you rely upon to know the percentages of  
20           how many of Mallinckrodt and Teva's sales  
21           were subject to chargebacks is reflected in  
22           those two footnotes in the reliance  
23           materials you looked at that's cited there,  
24           right?

25           A.    Yes.

1

2           Q.    And you don't know more broadly  
3           if those percentages could be expanded over  
4           different years for different products?

5                   That's beyond what you looked at?

6           A.    That's correct.

7           Q.    Okay.  And just in general, from  
8           a data perspective, using like the higher  
9           the percentage of orders that are subject  
10          to a chargeback, the more useful that tool  
11          would be, correct?

12                   MS. CONROY:  Objection.

13          A.    I wouldn't say useful.  It would  
14          just provide more data on which to flag.

15          Q.    And that's what I wanted to  
16          check.  Because in that next sentence in  
17          paragraph 125, you say, "Even with only  
18          partial coverage of downstream customer  
19          purchases, chargebacks were a useful tool  
20          in monitoring suspicious transactions at  
21          the pharmacy level from a manufacturer's  
22          perspective."

23                   Do you see where I read that?

24          A.    I do.

25          Q.    Okay.  And the extent to which

1

2 monitoring chargebacks could be a useful  
3 tool varies depending on how many  
4 chargebacks there are, right?

5 A. I don't want to speak to its  
6 usefulness, but I would say the more data  
7 you have, the more of a complete picture  
8 you have.

9 Q. If you have one order, two  
10 orders, you can't use that to analyze  
11 chargebacks, correct?

12 A. Of course --

13 MS. CONROY: Objection.

14 A. -- in this hypothetical, yes, if  
15 you had two, that's a pretty difficult --

16 Q. Too small to analyze?

17 A. Yeah.

18 Q. So when you say here -- is there  
19 a threshold number beyond which I would not  
20 consider that data really useful to me?

21 A. No. I don't have a hard  
22 threshold that I would set, no.

23 Q. In looking at table 34 on page  
24 59, in the left-hand column we have the  
25 parent companies.

1

2 Are you with me?

3 A. Yup. Sorry.

4 Q. The next column says Labeler  
5 Names, and that shows what companies you  
6 aggregated into the parent company.

7 Am I right about that?

8 A. Yes.

9 And I think throughout this  
10 section we keep things -- keep companies  
11 generally separated based off the  
12 productions.

13 Q. Exactly where I was going.

14 So here, I represent Allergan,  
15 and so I'll just look at Allergan, for  
16 example.

17 Here, you break out Allergan from  
18 Teva in the chargeback analysis, right?

19 A. Correct. Because of the  
20 different productions.

21 Q. The data that is reflected in  
22 table 34, this shows nationwide data. This  
23 is not limited to Cuyahoga and Summit  
24 County, right?

25 A. I honestly don't remember. I'd

1

2       have to consult the code that pulled that  
3       table to be for certain.

4           Q.    Okay.  You don't know one way or  
5       the other as you sit here whether this  
6       is -- the number of chargebacks in the  
7       right-hand column, so the 7,519,723 for  
8       Endo, is that total number of chargebacks  
9       or is that in Cuyahoga and Summit County or  
10      you don't know?

11          A.    I'd have to check the code.  I'm  
12      really sorry.  Usually I put in the paren  
13      what it is, and this one slipped by me.

14          Q.    So I'll represent to you -- I  
15      don't mean this to be a trick.  I will  
16      represent to you that from our analysis of  
17      your data, this appears to be the  
18      nationwide chargeback data.

19          A.    Okay.

20          Q.    And so for Cuyahoga -- do you  
21      know how many counties are in the United  
22      States, roughly?

23          A.    Well, over 3,000.

24          Q.    And so for each county, for  
25      example Allergan, do you see there that it

1

2       says 13,986 total chargebacks in the data?

3

4               That do you understand that to be  
5       the total number of chargebacks that you  
6       found in the Allergan data?

6

A.    Yes, after processing, yes.

7

8       Q.    And then -- and that's 16 years  
9       of data, right?

9

A.    Yes.

10

11       Q.    And if you divide that by 3,000  
12       counties, you only have a, on average,  
13       couple chargebacks per county, right?

13

14       A.    Sure. I don't want to do mental  
15       math on camera, but sure.

15

16       Q.    I won't make you, I won't make  
17       you commit to actual numbers, but I think  
18       you get my point.

18

19       For -- I assume you're not going  
20       to offer the opinion that analyzing a  
21       handful of chargebacks less than a dozen  
22       over a 20-year time period would be a  
23       useful tool for suspicious order  
24       monitoring.

24

25       You would agree with me that it  
26       would not in fact be a useful tool for that

1

2       based on a matter of data, correct?

3                   MS. CONROY: Objection.

4           A.    Let me think about this a little  
5   bit.   I think it really depends on the data  
6   and...

7           Q.    So I'm going to mark as  
8   Exhibit 6, a very, very long piece of  
9   paper.

10                   (Keller Exhibit 6, Spreadsheet,  
11       not Bates-stamped, marked for  
12       identification, as of this date.)

13   BY MS. LEVY:

14           Q.    I'm going to tell you what this  
15   is in a minute.   But take a look at it and  
16   see if you recognize what this data is  
17   before I describe it to you.

18                   (Document review.)

19           A.    I do recognize it.

20           Q.    You do or don't?

21           A.    I do.

22           Q.    Okay.   This is what we were  
23   talking about earlier, like, the ginormous  
24   amount of information in the file that you  
25   have.



1

2                   If you look at the top left-hand  
3       corner, that says "chargeback\_flagging."

4                   Do you see that?

5           A.     Um-hmm.

6           Q.     Okay.

7                   MS. LEVY: [Directed to court  
8       reporter] What exhibit are we on, 6?

9                   THE REPORTER: (Nodding  
10       affirmatively.)

11       BY MS. LEVY:

12           Q.     So the chargeback\_flagging file  
13       has a very long number of columns that go  
14       from left to right.

15                   Do you see that?

16           A.     Um-hmm.

17           Q.     And reflected in each of the  
18       columns are the metrics that you ran across  
19       the chargeback data and the flags that came  
20       up as a result; is that right?

21           A.     I think that's correct.

22           Q.     And so in other words, when I  
23       looked across all of this data, the only  
24       values in each of these columns are zero or  
25       1.

1

2                   That's like a data science thing,  
3       yes?

4           A.    Yeah, flagged or not flagged,  
5       yeah.  It's not meant to be a joke or  
6       anything.

7           Q.    We don't talk like that as  
8       lawyers, but I think how I interpret this  
9       data is, if there is a zero in the column,  
10      that means it did not trigger a flag under  
11      that particular metric.  And if there is a  
12      1, this metric did trigger a flag.

13                   Is that correct?

14           A.    That's great.

15           Q.    Okay.  And so if you look at, up  
16      here in the top left, "query," it says  
17      "from chargeback\_flagging."

18                   That is, you understand, to be  
19      your chargeback flagging reliance file,  
20      correct?

21           A.    Yeah, the table name is familiar  
22      to me.

23           Q.    And where it says "Where labeler  
24      name equals Allergan and buyer\_state equals  
25      Ohio and\_county in Cuyahoga and Summit,"

1

2       what does all that mean in data-speak?

3           A.     So this looks like a SQL query to

4       me that's pulling from a schema name DBO to

5       a chargeback flagging table, which is

6       probably your renaming of our table, which

7       is totally fine. And it's pulling data

8       where it is Allergan as the labeler, where

9       the state is Ohio, and Cuyahoga and Summit

10      are the counties. So good job at SQL.

11           Q.     And is this the way you would

12      query it if you want to see how many

13      Allergan chargebacks got a flag in Cuyahoga

14      and Summit County? Is that the methodology

15      you'd use?

16           A.     I would take it one step further.

17      If I wanted to look at those that were

18      flagged for Allergan and Summit or

19      Cuyahoga, I would say where one of these

20      would be equal to 1.

21           Q.     So you would have to add up

22      everything in this table that got a 1 and

23      that's how you would know how many flags it

24      got?

25           A.     Or a really massive "or" clause

1

2       where you would say where two times the  
3       national average is equal to one or three  
4       times the national average is equal to one  
5       or so on and so forth.

6               Q.     But in Exhibit 6, each one of  
7       those queries appears separately from right  
8       to left.

9                       Do you see that?

10              A.     They're columns, not queries,  
11     but, sure.

12              Q.     Okay. So what this shows us is,  
13     there were a total of 15 chargebacks over  
14     this 20-year period for Allergan drugs,  
15     right?

16              A.     I'm not sure that that is correct  
17     because this appears to be an aggregation.  
18     Like I said, the chargeback flagging table  
19     is an aggregation of chargebacks, and I  
20     would have to look at this myself. A  
21     couple of them have 2s next to them so like  
22     at line 7, there is a value of 2. So this  
23     could be 15, 16, 17, 18.

24              Q.     So I apologize. And you have --  
25     I accept your correction.

1

2

So in the first column to the

3

right of the row number, we see total

4

number of chargebacks, and there is a value

5

of 1 listed for all of them except for row

6

7, 13 and 15, and that has two chargebacks

7

in each of those, correct?

8

A. 7, 13 and 15, correct, have two

9

chargebacks.

10

Q. And so what that tells us is

11

there were 18 chargebacks, not 15, but 18

12

chargebacks over this 20-year time period

13

for the Allergan labeler code, correct?

14

A. That were submitted to us or that

15

I had in the data set, yes.

16

Q. Okay. And I'm going to pass over

17

to you, just to make this easier and

18

faster, my version of this.

19

(Handing.)

20

A. Do we need to mark this?

21

Q. And I will represent to you that

22

I have highlighted the three transactions

23

or the three rows that reflect any flag

24

from your metrics. So take a look at that

25

and -- is yours highlighted too?

1

2 A. Yes. Would you like this back?

3 Q. Yes.

4 (Handing.)

5 Q. Thank you. This would make it  
6 easier.

7 So what I've done in the  
8 highlighted -- we highlighted everything  
9 that had a flag.

10 Do you see that?

11 A. Yes, sorry. Yes.

12 Q. And so what this shows us is that  
13 in the 20-year time period, you came up  
14 with or your data would reflect four  
15 chargebacks that would get a flag if you  
16 applied all of your metrics in total for  
17 Allergan.

18 Do you see that?

19 A. I'm trying to look at this  
20 without grids, but I'm going to take your  
21 word for it.

22 (Document review.)

23 A. But I see where you're flagging  
24 the 1s. And there are a line, and so that  
25 reflects that group of chargebacks to that

1

2       buyer ID.

3

4               Q.    And then if you just look at row  
5       11, for example, the total doses, what does  
6       total doses mean?

7

8               A.    So one could think of that as the  
9       number of pills it's like the dosage units.  
10       And so generally, that's a field in the  
11       data.

12

13              Q.    And if you look at the doses in  
14       row 11, that's 200 doses.   And then right  
15       beside it, it says total MMEs is 2,000.

16

17                    Do you see that?

18

19              A.    Correct.

20

21              Q.    So it means 200 pills at 10  
22       milligrams a pill in that order, correct?

23

24              A.    Because it is hydrocodone, yes,  
25       you can do that math.

26

27              Q.    And so that reflects -- if you go  
28       over to data date, that reflects 9/1/2005,  
29       an order of 200 pills of 10-milligram  
30       hydrocodone for a chain pharmacy in Summit  
31       County, correct?

32

33              A.    Yes, it's a chargeback request  
34       for that.   I wouldn't say it's an order.

1

2           Q.    And my point from this data is --  
3           did you look at what product this is?  You  
4           didn't go behind any of the flags and look  
5           for what product this is or how many  
6           prescriptions this would fill?  That's not  
7           something you did, is it?

8           A.    So to the extent that we needed  
9           the product to get the MME conversion  
10          factor, I would have looked at that on the  
11          aggregate.

12                    To the extent that the product  
13          mattered for a particular flag, because I  
14          think some flags go to the NDC, I would  
15          have looked at that.

16                   For this specific order on this  
17          specific date to this specific buyer, I did  
18          not look at that particular NDC code.

19                   And to your second question, I  
20          did not, across the board, analyze how many  
21          prescriptions that would or should or could  
22          have filled.

23           Q.    Okay.  And so I think just taking  
24          a step back, there comes a point when you  
25          have so little data that it is not useful



1

2 for using as an order for suspicion.

3 Would you agree that that is true  
4 in the abstract?

5 MS. CONROY: Objection.

6 A. As like the example that you  
7 pointed out earlier, one or two, yes,  
8 unusable.

9 Q. Okay. And in here, you do not  
10 intend to offer any opinions that a flag  
11 for a single order should have been labeled  
12 by Allergan as suspicious? That is beyond  
13 what your offering in this case, correct?

14 MS. CONROY: Objection.

15 A. Yes, because you used the word  
16 "should." No, I'm not.

17 Q. Okay. Which of the orders that  
18 were subject to the chargebacks in  
19 Exhibit 6 are suspicious in your analysis?

20 A. So I think that's what we were  
21 covering earlier. And for one, when I  
22 answer this question, when I say  
23 suspicious, they triggered the compliance  
24 metrics.

25 So those would be this order here

1

2           on row 15. I'm taking your math for it,  
3           but it looks to be generally right. Row 11  
4           and row No. 4.

5           Q. And you don't intend to offer any  
6           opinion that actually in the real world,  
7           these were suspicious orders or DEA would  
8           consider these suspicious orders, correct?

9           A. Correct.

10          Q. Okay. And the same analysis,  
11          this one in Exhibit 6 is unique to  
12          Allergan.

13                 Did you isolate for any other  
14          labeler the exact number of chargebacks in  
15          Cuyahoga and Summit County?

16          A. Where we would, like, create a  
17          table like 34 for Summit and Cuyahoga, no.

18          Q. Okay. Why didn't do you that?  
19          There are many other places in your report  
20          that you looked specifically at Cuyahoga  
21          and Summit County. Why did you not do that  
22          for purposes of table 34?

23          A. Honestly, I have no idea, but  
24          it's easy to run and could be done no  
25          problem, and I'd be happy to do that for

1

2       you guys.

3

4               Q.    If you look at table 38 on page  
5       61, this gives you -- the table is called  
6       "Number of flagged buyers attributed to  
7       each labeler."

8

9               Again this is on a national  
10       level, not Cuyahoga and Summit, right?

11

12              A.    I would think this would be  
13       Cuyahoga and Summit.

14

15              Q.    Do you know one way or the other?

16

17                   (Document review.)

18

19              A.    It should be Cuyahoga and Summit.

20

21              Q.    Okay.  And the numbers for  
22       flagged buyers varied depending on which  
23       one of the metrics or matrices you run  
24       across table 38, right?

25

26              A.    Correct.

27

28              Q.    So if you run -- for Allergan, if  
29       you ran the double national metric, you  
30       would find one flagged buyer in Cuyahoga  
31       and Summit County?  Is that what that  
32       means?

33

34              A.    Correct.

35

36              Q.    And you would find zero for some

1

2 of these and two they hit on any flag.

3 Is that a correct reading of this  
4 table?

5 A. Correct.

6 Q. And again, I think you've now  
7 said this many, many times, but it's not --  
8 you do not intend to offer any opinion that  
9 these are, in fact, suspicious orders or  
10 suspicious purchases by buyers. That is  
11 beyond what you are able to do and beyond  
12 your expertise, correct?

13 MS. CONROY: Objection.

14 A. Correct.

15 Q. And that's true for Allergan, but  
16 also all of the other labelers on the  
17 left-hand column?

18 A. I would say so, yes.

19 Q. Okay. And the same with table 39  
20 and the dosage units, I think generally the  
21 same thing applies.

22 The number of flagged dosage unit  
23 changes, depending on which one of your  
24 metrics are applied, correct?

25 A. Correct.

1

2           Q.    And for Allergan specifically,  
3           where there's no value in a column, that  
4           means there's no flagged dosage units under  
5           that metric, right?

6           A.    Correct.

7           Q.    And then where there is a value  
8           for Allergan under these columns, that is  
9           the total amount of dosage units  
10          attributable to Allergan in this 20-year  
11          period that got a flag; is that right?

12          A.    Based on the data that we had  
13          available, yes.

14          Q.    And the dosage units are pills  
15          basically, correct?

16          A.    Correct.

17          Q.    So 200 pills in 20 years for  
18          Allergan under the "common sense, masters"  
19          column.

20                 Do you see that?

21          A.    Correct. I do see it. That  
22          should be the right answer, sorry.

23          Q.    Okay. And 200 pills, you don't  
24          have any idea how many prescriptions that  
25          would fill, right?

1

2 A. No.

3 Q. It could be just one prescription  
4 or two prescriptions, right?

5 MS. CONROY: Objection.

6 A. I would have no idea.

7 Q. Okay. And the same is true for  
8 all of the labelers listed in table 39, you  
9 don't have any opinion on whether the  
10 dosage units listed in these tables were  
11 actually suspicious or improper or not?  
12 You don't have any opinion on that, do you?

13 A. That's correct.

14 Q. Okay.

15 MS. LEVY: Let's take a -- would  
16 you rather take a short break or break  
17 for lunch?

18 MS. CONROY: Do you think the --  
19 well, isn't food there? Do you know?

20 MS. VENTURA: Yes.

21 MS. LEVY: There is. Are you  
22 hungry yet?

23 THE WITNESS: Yes, always.

24 MS. LEVY: Let's go off the  
25 record.

1

2

THE VIDEOGRAPHER: The time is

3

12:05 p.m. We are now going off the

4

record.

5

(Recess is taken.)

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

A F T E R N O O N        S E S S I O N

4

(Time noted:    1:06 p.m.)

5

THE VIDEOGRAPHER:    The time is

6

1:06 p.m.    We are back on the record.

7

\*                    \*

8

L A C E Y    R.    K E L L E R,        resumed

9

and testified as follows:

10

EXAMINATION BY (Cont'd.)

11

MS. LEVY:

12

Q.    Ms. Keller, I have a few more

13

questions to ask you based on my review of

14

the material at lunch and then I will pass

15

you off to some of the other defendants'

16

counsel in this room to ask questions.    But

17

I do have a few more things that I wanted

18

to follow up on based on our conversation

19

this morning and some other things that I

20

had flagged in your report that I meant to

21

ask you about --

22

A.    Sure.

23

Q.    -- and I have not yet done so.

24

          If we look at, back to your

25

report marked I think as Exhibit 2 and we



1

2 look at paragraph 2 on page 9. I'm sorry,  
3 Exhibit 5.

4 A. I'm sorry, we're at the report?

5 Q. Yeah, your report on page 9,  
6 paragraph 22, that is under the heading  
7 "Scope of report."

8 A. Sure.

9 Q. You mention in the first sentence  
10 in paragraph 22 that your report "focuses  
11 specifically and exclusively on  
12 manufacturers' anti-diversion and  
13 suspicious order monitoring programs."

14 Do you see that?

15 A. Correct, I do see that.

16 Q. Okay. I want to make sure that I  
17 understand the limitations of what you mean  
18 by that.

19 When you talk about in that  
20 sentence in 22, focusing on manufacturers'  
21 suspicious order monitoring programs,  
22 you're referring to what we've already been  
23 talking about all day today, which is what  
24 might have been or could have been in a  
25 hypothetical world had your metrics been

1

2       employed, right?

3                   MS. CONROY: Objection.

4           A.    Yes, I think that's a correct  
5       characterization.

6           Q.    And your analysis does not  
7       include, for example, an analysis of  
8       Allergan and a look at every single order  
9       that it did investigate.

10                   You didn't conduct such an  
11       analysis for Allergan or any other labeler,  
12       correct?

13           A.    Let me think about that for a  
14       second just to make sure I'm clear.

15                   I was... I think that is correct.  
16       I didn't look at the practices, I didn't  
17       evaluate the practices of Allergan. I  
18       didn't look at how each process was -- how  
19       each order was processed, monitored,  
20       flagged, unflagged or released, et cetera.

21           Q.    And to be clear, you had some  
22       information about suspicious order  
23       monitoring programs for the various  
24       labelers. You had some information, but  
25       you didn't do an analysis of which ones of

1

2       the orders were investigated versus weren't  
3       investigated.

4                   That was beyond what you did,  
5       right?

6           A.    I think -- I think that's  
7       correct.

8           Q.    Yeah, I'm not trying to be  
9       tricky. I just want to make sure.

10                   You never looked at for any of  
11       the flags that came up for any of your  
12       metrics in the real world whether a labeler  
13       actually did investigate those particular  
14       transactions? That, you never looked at,  
15       right?

16                   MS. CONROY: Objection.

17           A.    I think that's correct. I did  
18       have access to the Mallinckrodt peculiar  
19       orders data, but I didn't go as far as  
20       beyond looking at that data set.

21           Q.    And so for the set of  
22       transactions that are flagged under  
23       different matrices, you can't say which  
24       ones of those actually got investigated,  
25       which ones didn't, which ones were

1

2       legitimate, which ones weren't legitimate?

3       That is not something that you did in

4       connection with your work in this case,

5       right?

6             A.    Yes, I would not be able to state

7       which ones were legitimate or not.

8             Q.    Okay. And the extension of that

9       is, you have no opinion, you cannot opine

10      on what the impact would have been if a

11      labeler had investigated because you don't

12      know what those investigations would have

13      found, what would have happened after that,

14      correct?

15            A.    Yes, I think we've covered this

16      one earlier, but with the exception of the

17      hypothetical Janssen analysis, that is a

18      correct statement.

19            Q.    Okay. I forgot to talk to you

20      about your addendum. You provided an

21      addendum to your expert report.

22                    Do you know what I'm talking

23      about when I say the addendum?

24            A.    Yes, I do.

25            Q.    So how did this addendum come

1

2           about? Tell me the story of the addendum.

3           A.     Yes. So --

4           MS. CONROY: Is it marked?

5           THE WITNESS: I don't know

6           that --

7           MS. CONROY: Can we just mark it?

8           MS. VENTURA: Just a second.

9           MS. LEVY: It's Tab 3 in my  
10          binder.

11          Mark this as Exhibit 7.

12          (Keller Exhibit 7, Expert  
13          Analysis - Addendum: Lacey R. Keller,  
14          marked for identification, as of this  
15          date.)

16         BY MS. LEVY:

17           Q.     Exhibit 7 is your addendum,  
18          correct?

19           A.     Correct.

20           Q.     Okay. So what's the story as to  
21          how this came about?

22           A.     So one is a -- let me make sure  
23          I've got this all here.

24                   So one is the persistent flagging  
25          as I would say is similar to the

1

2 methodology that was contained in McCann's  
3 report, so I wanted to enact this here just  
4 to see what would be the results of the  
5 data after reviewing his report, also a  
6 similar 12-month trailing average. And  
7 then the final metrics are the Purdue  
8 metrics that we became aware of at the last  
9 moment, right before filing, and did not  
10 have time to enact. So I wanted to have a  
11 chance to adopt it or implement the Purdue  
12 metrics because I thought it was important  
13 to do so.

14 Q. Your original report was dated  
15 April 15th, correct?

16 A. Correct.

17 Q. This addendum, do you remember  
18 the date of it? I don't see it on here.

19 A. I do not.

20 Q. I'll represent to you that the  
21 addendum was submitted on May 11th.

22 Does that sound about right to  
23 you?

24 A. That seems generally correct.

25 Q. Was there any reason that you

1

2       could not have done your persistent  
3       flagging analysis in advance of your  
4       April 15th report?

5             A.    Mostly just time.

6             Q.    What do you mean by that?

7             A.    Just ran out of time already  
8       preparing we had there, so it was a very  
9       natural place to just let's do what we have  
10      here and then we'll do that as a separate  
11      addendum.

12            Q.    And you didn't get any additional  
13      information between April 15th and May 11th  
14      that would have created that analysis?

15            A.    Correct.

16            Q.    You had the information all  
17      along, correct?

18            A.    Correct.

19            Q.    You just ran out of time to do it  
20      before April 15th?

21            A.    Correct.  Because I believe the  
22      first McCann report uses the persistent  
23      flagging methodology that he had filed.  So  
24      yes, we could have filed this with the  
25      April 15th.  I just ran out of time.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

And the Purdue metrics that we found, like I said, we literally found them days before, and I just didn't feel that it was prudent to implement something that I found doing a document review.

Q. You do not take an opinion in the addendum as to whether the persistent flagging approach makes any sense or not? That's outside the scope of your opinion, right?

MS. CONROY: Objection.

A. Yes, as with all the other metrics or approaches, I'm agnostic.

Q. And did you ever ask DEA, does this make any sense to you, DEA to put a flag on and keep it for perpetuity? Did you ever ask that question of DEA?

A. No. Like I said earlier, my only correspondence with the DEA has been over basic ARCOS processing.

Q. Okay. And you don't intend to offer any position at trial as to whether it makes more sense to employ the persistent flagging approach or the



1

2 continuous evaluation approach?

3 A. Sure.

4 If you want to -- what I think  
5 you're saying is one where we reset the  
6 flags every month or every X time period  
7 versus leaving the flag on once it's  
8 flagged? Yes, I have no opinion on  
9 whether -- on either -- sorry, I'm getting  
10 hung up on my words -- on whether each one  
11 is correct or not correct. We just  
12 implement them.

13 Q. If we look at your addendum on  
14 page 9, table 1, and if we compare that  
15 side by side with, I think it's table 36 at  
16 page 34 in your report.

17 (Document review.)

18 A. I'm going to bet that you may  
19 want table 7.

20 Q. Table 7 on page 29. These two  
21 reports or these two tables represent the  
22 results -- the composite results of this  
23 analysis under the two different  
24 approaches, correct?

25 A. Correct.

1

2           Q.    And if you look at -- for these  
3           two analyses, you just picked four of the  
4           metrics. You didn't do them all.

5                   Do you see that?

6           A.    So it wasn't happenstance like  
7           cherry-picking or not. No, that wasn't the  
8           case.

9                   So with some of the metrics where  
10          they could have applied to IQVIA, I did.  
11          Where it came to the labeler's own metrics,  
12          it felt most appropriate to apply those  
13          only to the chargeback, their own data  
14          so...

15          Q.    And that was most appropriate  
16          because that's the data set that those  
17          metrics were designed to look at, right?

18          A.    Correct. In reading the metrics  
19          and the documentation behind them, it  
20          looked as if they were designed to apply to  
21          pharmacies or to sales data or to some sort  
22          of internally housed data set, so that was  
23          my intention, yes.

24          Q.    I was going to ask you about  
25          that. That's important to keep straight

1  
2 because if you apply a metric that is  
3 designed to look at distributor orders, if  
4 you apply it to pharmacies, the results are  
5 going to be in some ways skewed, right,  
6 because the metric is not designed to apply  
7 to that kind of data? Is that what you're  
8 getting at?

9 A. I would say it's more that I felt  
10 like it was most honest or most like in the  
11 truest sense of the metric to apply it to  
12 the data set that it was intended for. Not  
13 to mix distributor versus manufacturer  
14 metrics, but just to the data set that it  
15 was designed for.

16 The larger ones, the double  
17 national, triple national, common sense,  
18 and McKesson, were kind of at a -- I viewed  
19 them as a different level as the  
20 manufacturer's own metrics. Because I  
21 don't know that, let's say, Purdue would  
22 know Mallinckrodt's metric. But these  
23 other metrics are like in a different  
24 realm, if you will, is because they were  
25 the result of an enforcement action or --

1

2       so to me, they got a different treatment  
3       among the data sets.

4               Any metric could have been ran  
5       against all the data, and I could do that  
6       very easily for you and would be happy to,  
7       but it was my intention to try to keep  
8       things to their truest sense.

9               Q.    I think I understand what you're  
10       saying.

11               You tried to apply the metric  
12       designed for that type of data to that type  
13       of data?

14               A.    That's a very nice way of saying  
15       it much more succinctly than I did.

16               Q.    And so for these four metrics,  
17       common sense, I'm using that term in air  
18       quotes for the video, air quote words for  
19       the transcript, the metric that is referred  
20       to, air quote, common sense, double  
21       national average, triple national average,  
22       and McKesson 8,000, those were the ones you  
23       picked to run over the IQVIA data for the  
24       tables that we see in table 1 of the  
25       addendum and table 7 of your original

1

2 report, right?

3 A. Yes, those four metrics we ran on  
4 the IQVIA data, correct.

5 Q. The results of the metrics change  
6 a little bit depending on whether you do  
7 the resetting flags or the persistent  
8 flagging, correct?

9 A. Correct. As --

10 Q. Go ahead. I didn't mean to cut  
11 you off. Go ahead and finish your answer.

12 A. I was going to say, yes, it  
13 depends on what metric you're looking at  
14 there.

15 Q. But if you look at column 1,  
16 "Defendant labeler flagged physicians,"  
17 that number actually doesn't change between  
18 the two analyses, right?

19 A. Right. Because that one makes  
20 sense, right? Because once a foot position  
21 is flagged, at some point that is a 1 or a  
22 zero, so it doesn't really, it won't -- it  
23 doesn't change whether you leave that flag  
24 on or not.

25 Q. A number of physicians get

1

2       flagged in these counties varies wildly  
3       depending on which metrics you use, right?

4           A.    Yes.   Like you can see here  
5       anywhere between 1 and 75 percent.

6           Q.    And you take no position as to  
7       which one is right or which one is closest  
8       to right, do you?

9           A.    That would be correct.

10          Q.    But it doesn't make much sense as  
11       a matter of common sense that 8 out of 10  
12       physicians in these counties are  
13       prescribing suspiciously.

14                    That is not what you mean to  
15       suggest with this analysis, correct?

16                   MS. CONROY:  Objection.

17          A.    So I'm going to break that into  
18       two pieces.

19                   One, I'm making no assessment of  
20       the real world of who is suspicious or not.  
21       I will say with physicians, with that count  
22       of physicians specifically, if you get  
23       flagged once, and I think we say this in  
24       the report, if you get flagged once or you  
25       get flagged hundreds of times for every

1

2 month that you've ever prescribed, you're  
3 still counted the same.

4 So that's why that number looks  
5 as it does compared to the prescriptions.

6 Q. The number is -- the percentage  
7 of physicians is grossly larger than the  
8 percentage of physicians in the real world  
9 that actually prescribe suspiciously. It's  
10 not meant to represent that, right?

11 MS. CONROY: Objection.

12 A. I wouldn't know.

13 Q. Okay. I mean, you could design a  
14 metric that uses a parameter that all  
15 opioids are suspicious and 100 percent of  
16 prescribers who prescribe them should be  
17 suspicious. You can define it that way and  
18 get 100 percent suspicious under some  
19 metric, right? That's something you could  
20 do if you used the right definition?

21 A. I would say that would be  
22 something that someone could do. I don't  
23 know that I would do it, but that could be  
24 done if asked of someone.

25 Q. It would not be useful to

1

2 describe a metric so comprehensive that it  
3 captured 100 percent of the prescribers in  
4 a jurisdiction? That would not be a useful  
5 thing to do, would it?

6 A. I would say, you know, I'm not --  
7 I don't want to weed into or wade into  
8 evaluating metrics, so I'm not really going  
9 to pontificate on that.

10 Q. Well, if we take a step back to  
11 what you do as a data scientist to generate  
12 leads, if you create a metric that captures  
13 everybody who is doing something, that  
14 doesn't generate any leads for you, does  
15 it?

16 A. Or it generates all the leads  
17 but --

18 Q. It generates the lead of  
19 everybody in the whole --

20 A. -- it doesn't prioritize them.

21 Q. Right.

22 So when you're looking to create  
23 sensible useful metrics, the ideal way to  
24 do so is to create metrics that come up  
25 with, as close as you can, to the actual



1

2 behavior you're trying to analyze, correct?

3

MS. CONROY: Objection.

4

A. I'm not really in a position to  
5 evaluate metrics. I think we've talked  
6 about that earlier. So I don't really want  
7 to wade into that.

8

Q. Well, I understand that you're  
9 not offering any opinions about  
10 specifically in this case what the metrics  
11 should be or shouldn't be. I understand  
12 that and you've testified a great deal  
13 about that.

14

But stepping back, like for  
15 example, your other work in the New York  
16 Attorney General's Office, when you  
17 designed metrics to analyze data and target  
18 gun traffickers -- that was something that  
19 you did, right? When you're doing that,  
20 you're trying to design metrics that  
21 isolate the bad guys, right?

22

MS. CONROY: Objection.

23

A. Correct.

24

Q. And the most -- you know, in the  
25 ideal world, what someone should do to try

1

2       to look for aberrant behavior is to create  
3       sets of metrics that get as close to as you  
4       can isolating the behavior that you're  
5       targeting? I mean, that's the goal in  
6       doing all this, yes?

7             A. I would think from a logical  
8       perspective, that makes sense.

9             Q. And metrics that are overly  
10      comprehensive that capture everybody or the  
11      vast majority of people doing something as  
12      opposed to just the bad guys, those are  
13      less helpful than more targeted metrics  
14      designed more closely to target bad  
15      behavior, as a conceptual matter that would  
16      be true, right?

17            MS. CONROY: Objection.

18            A. Yeah, I guess I don't -- I don't  
19      really...

20                    I think when you're looking for  
21      bad -- I think when's designing metrics,  
22      you have different goals in mind for  
23      whatever you're doing, right?

24                    For gun trafficking, for example,  
25      maybe I'm only looking for straw purchasers

1

2 or whatnot. That is a very unique fact  
3 pattern.

4 I think by looping things into  
5 bad guys or good guys or suspicious  
6 activity or not, there is a lot that's  
7 packed into that that I don't really want  
8 to blanket state like a metric that should  
9 or shouldn't do anything when it comes to  
10 that.

11 Q. I mean, if I'm a labeler and I  
12 design a metric that captures 80 percent of  
13 prescribers, that's not going to be very  
14 helpful to me, is it?

15 MS. CONROY: Objection.

16 A. I wouldn't know.

17 Q. Page 13 of your original report,  
18 if you can flip with me to that.

19 (Witness complies.)

20 Q. I'm confused on where I want to  
21 look at. Just a minute.

22 What is LRX data?

23 A. So I haven't seen it, so I can't  
24 speak definitively. But what I have read,  
25 as I understand it to be longitudinal -- I

1  
2 think that's what it stands for like  
3 longitudinal data from IQVIA that allows  
4 you to see a little bit more granular, a  
5 little bit more granularity about the -- I  
6 think it has patient, prescriber, pharmacy,  
7 like all of that in the data.

8 And again, this is a little bit  
9 hearsay because I have never seen the data,  
10 so I can't speak to that definitively.

11 Q. Okay. You don't know really know  
12 what it looks like because you've never  
13 seen it?

14 A. Correct. I've seen references to  
15 it.

16 Q. Looking at page 13 of your  
17 report, in paragraph 40, this is under  
18 limitations of your analyses, I assume,  
19 from what you just told me, that you did  
20 not do any analysis on LRX data if you  
21 haven't ever seen it?

22 A. Correct, I did not do any  
23 analysis on LRX data. The only reason why  
24 I know it exists, I think, is from that --  
25 if that cite doesn't capture it, somewhere

1

2 I have a cite that would -- that -- where  
3 we know it exists.

4 Q. And when you make the blanket  
5 statement in paragraph 40 about LRX data  
6 being used in investigations of suspicious  
7 prescribers and downstream customers, the  
8 only information you have about that is  
9 what is cited in footnote 10, correct?

10 MS. CONROY: Objection.

11 A. I'm sure there's more, but I  
12 believe so. And I can't recall which of  
13 those many cites for that paragraph are  
14 there, which has the reference to the LRX  
15 data, but...

16 Q. You don't know which  
17 manufacturers had or didn't have it?

18 A. I don't -- so I would know from  
19 the cite here who references that, but I  
20 did not, as we were discussing earlier, do  
21 a comprehensive review of who purchased or  
22 didn't purchase.

23 Q. Or what time periods it might  
24 have been purchased or what portion of it  
25 might have been purchased, that's not an

1

2       analysis that you did?

3           A.     Correct. I did not look at who  
4       purchased, when, where, why or how LRX  
5       data.

6           Q.     And both with respect to LRX  
7       data, but also more broadly with respect to  
8       Xponent data and IQVIA data in general,  
9       there is no requirement that a manufacturer  
10      buy that data, right?

11          A.     I wouldn't be able to say that.

12          Q.     You don't know one way or the  
13      other?

14          A.     It's outside of my expertise.

15          Q.     Okay. IQVIA data, you're aware  
16      that the IQVIA data for a particular drug  
17      reflects the labeler that holds that drug  
18      today for the entirety of the IQVIA  
19      database? You're aware of that, right?

20          A.     So I would say what we understood  
21      based off the files that we received, we  
22      were given, maybe you can call it a control  
23      file, that had the keys to the codes of  
24      which labeler were what. We had asked  
25      repeatedly for historical versions of this

1

2 file so that we could identify the labeler  
3 historically. But, yes, I think that file  
4 was dated fairly recently.

5 Q. You just said it a thousand times  
6 better than I could.

7 You were unable to tell from the  
8 code that IQVIA provides how long a  
9 particular labeler had held that product?  
10 In other words, you couldn't tell who had  
11 the product historically, right?

12 A. Correct, even though we had asked  
13 for historical versions of that file.

14 Q. And so the limitations of that  
15 data would not allow you to separate out  
16 for Allergan a time period that it didn't  
17 have one of the products, that's not  
18 something you could do with the IQVIA data  
19 that you were given?

20 A. Correct. If they were assigned  
21 whatever code they were in the control file  
22 that we were given as part of the Allergan  
23 production, then that's what was applied  
24 for the entire data set.

25 Q. And so for Allergan and its

1

2 product, Kadian, for example, if IQVIA has  
3 Kadian under the Allergan labeler code  
4 today, your analysis would have Kadian as  
5 an Allergan product for the whole 20-year  
6 time period because you had no way to  
7 understand or take out any other time  
8 periods? Am I right about that?

9 A. That's correct. We had asked for  
10 that file. It wasn't either available or  
11 producible, so, yes.

12 Q. And if you came to understand  
13 that Allergan did not own Kadian for a  
14 portion of that time period, that would  
15 change your analysis, correct?

16 A. Someone else would have been  
17 attributed that Kadian product in the data  
18 set. It's not to say that that point of  
19 data would drop out completely or anything  
20 like that. And it wouldn't change my  
21 fundamental findings of applying the  
22 compliance metrics. It might change a few  
23 numbers in the tables, what's attributed to  
24 Allergan or not, but I wouldn't say -- I  
25 wouldn't characterize that as changing my



1

2       analysis.

3

4               Q.    The flags would still be there,  
5       they would just be somebody's else's flags,  
6       not Allergan's, right?

7

8               A.    Depending on the purchasing  
9       history, but, yes.

10

11              Q.    Got it.

12                   And the same would be true for  
13       any other labeler who had historically  
14       changed possession of products over time,  
15       right?

16              A.    Correct, which is why we asked  
17       very hard to obtain that file.

18              Q.    And IQVIA could not provide it,  
19       could they?

20                   MS. CONROY:  Objection.

21              A.    I don't know who it was asked of  
22       or where.  I know I had requested it and  
23       was very firm in those requests.  I don't  
24       know if it was requested of defense or by  
25       IQVIA directly.  That's beyond me.

26              Q.    Because that was data that you  
27       really wanted to see and it would have been  
28       important for you to know, right?

1

2

MS. CONROY: Objection.

3

4

5

6

7

8

9

10

11

A. Yes, it would -- you know, I want things to be most accurate and so I want -- if I had historical knowledge I would have liked to have applied that, yes. But I don't -- I don't know that it -- like I said earlier, I don't know -- it doesn't fundamentally change the results.

10

11

Q. It doesn't change the number of flags?

12

13

14

15

16

A. I mean each flag depends on the purchasing history of a particular prescribing history, so it's a little bit more complicated than that, but the flags would still exist, but --

17

18

Q. They'd be attributed to different defendants?

19

20

A. Correct, with a big asterisk there.

21

22

MS. LEVY: Okay. Let's mark this document as Exhibit 8.

23

24

25

Do you have more copies of this, Jayne? These are the corrections you brought today.

1

2

MS. CONROY: We have a copy over

3

here. I think I gave everybody --

4

MS. LEVY: We passed them out.

5

Okay. Let's mark this as Exhibit 8.

6

I've got another one that I can ask

7

about.

8

(Keller Exhibit 8, "Corrections

9

to Expert Analysis," prepared by Lacey

10

R. Keller, not Bates-stamped, marked

11

for identification, as of this date.)

12

BY MS. LEVY:

13

Q. Who created Exhibit 8?

14

A. I did.

15

Q. Did you use fancy data science or

16

is it a plain old Excel or Word document?

17

A. That is a plain old Word document

18

that actually started with old chicken

19

scratch of my reports. For nicety for you

20

guys, I didn't hand you the chicken

21

scratch.

22

Q. How did Exhibit 8 come about?

23

Like how, when, and why was it created?

24

A. So I would say I compiled it, we

25

compiled it last night to send to you just

1

2 to make sure that everything was nice and  
3 neat as opposed to, you know, all over my  
4 report here.

5 I would say it's the culmination  
6 of, since I filed it, a review of the  
7 report trying to make things correct. I'm  
8 sure there is some typos and such, but  
9 these were substantive changes that I  
10 wanted to point out.

11 Q. And are these changes that are  
12 reflected in the right-hand column, are  
13 these things that others pointed out to you  
14 or that you just discovered on your own the  
15 more you read it after the fact?

16 A. Every single one of them, I  
17 discovered.

18 Q. Okay. This is a classic woman  
19 second-guessing and second-guessing and  
20 second-guessing her own work.

21 Okay. And so none of these were  
22 like the lawyers telling you to change it  
23 from something to another? These are just,  
24 these are just corrections you discovered  
25 you want to make on your own?

1

2           A.     Correct.

3           Q.     And you said this was prepared  
4     last night.

5           A.     For production to you guys I  
6     think just to make today easier. I had  
7     them for quite some time and was putting  
8     them, but, yes, the document here.

9           Q.     I just want to run through this  
10    quickly.

11                     In paragraph 33, you say that  
12    "would" should be "could." And that  
13    relates to what we've already talked about  
14    today, is that you are not saying what  
15    would have happened, you're saying  
16    hypothetically what could happen, correct?

17           A.     Correct. You've made a lot of  
18    these quite easy to explain now.

19           Q.     In paragraph 86, the 7,000 to  
20    5,000, how did you discover that  
21    discrepancy?

22           A.     I went through after filing the  
23    report and, like you said, we always check  
24    and recheck our work, and I just -- I  
25    wanted to make sure that every number was

1

2 as right as I could make it. So that one,  
3 I just reran it and realized that there was  
4 a discrepancy there.

5 Q. Okay. And the change in  
6 paragraph 125 for table 35, last column, it  
7 says the second, third and fourth "no"  
8 should be a "yes."

9 So where you say "no, Endo did  
10 not use chargeback in SOM program," you  
11 mean -- so let me speak in a way that our  
12 court reporter can transcribe.

13 Turning to table 35, on page 59  
14 of your report and looking at that in  
15 conjunction with Exhibit 8, your  
16 corrections, you note that in table 35, in  
17 the last column of that table, the second  
18 "no" should be a "yes"; is that right?

19 A. Yes. So Endo's "no" in the "used  
20 chargeback in SOMS program" should be  
21 "yes," followed by "Par and Qualitest."

22 And that's to jive with the  
23 language below.

24 Q. Okay. The metrics that you've  
25 used, I'm getting to the end of my

1

2       questioning, the metrics that you've used  
3       in your report in its addendum, these  
4       metrics could have been used by others  
5       other than the defendants in this case,  
6       right?

7                   MS. CONROY:  Objection.

8               A.     Because you used the word  
9       "could," I would say yes.

10            Q.     The DEA could have run these  
11       metrics had it chosen to do that, right?

12            A.     I would think so, yes.

13            Q.     Law enforcement of other types,  
14       other than DEA, could have run these  
15       metrics if they had chosen to do that?

16            A.     I would think so, yes.

17            Q.     Cuyahoga, Summit County could  
18       have run these metrics if their law  
19       enforcement wanted to run them?  They could  
20       have done that?

21            A.     Correct.  Anyone who had access  
22       to the data or had access to the metrics  
23       could run them.

24                   MS. LEVY:  I'm going to mark the  
25       invoices.

1

2           A.    Do me a favor and get your  
3           invoices, which I believe we marked  
4           previously as Exhibit 3.

5           MS. LEVY: Did we mark the  
6           invoices?

7           MS. CONROY: Yes.

8           A.    We did.

9           MS. LEVY: Okay. We already have  
10          them marked as Exhibit 3.

11          (Keller Exhibit 9, Word document  
12          prepared by Keller, not Bates-stamped,  
13          marked for identification, as of this  
14          date.)

15       BY MS. LEVY:

16          Q.    I'm going to hand you Exhibit 9,  
17          and I will represent to you that Exhibit 9  
18          was created by asking data entry folks to  
19          put into a table the information that came  
20          from your invoices in Exhibit 3.

21          You've never seen Exhibit 9  
22          before, correct?

23          A.    That is correct.

24          Q.    And this is something that we  
25          created, not something that came from you.



1

2 But do you recognize the content of the  
3 information generally? I'm not asking you  
4 to tell me whether it's correct or not, but  
5 do you recognize what the types of  
6 information in here are?

7 A. Yes. The case names look similar  
8 to ones that are in the invoices.

9 Q. Okay. And for purposes of these  
10 questions, I will ask you to accept that  
11 this is an accurate extraction from the  
12 invoices here, but I recognize that you  
13 just have to accept my assumption on that.  
14 I'm not asking you to compare thing by  
15 thing. But if you accept that assumption,  
16 then I'd like to go through and ask, just,  
17 you know, what do these descriptions mean.

18 What does opioid DMA mean in the  
19 Project column on the first page of  
20 Exhibit 9?

21 A. It means -- I mean, there's a  
22 number in front of it, which is some  
23 computer-generated case number by the  
24 OpenAir system.

25 Opioid DMA is data mining

1

2 analytics.

3 Q. Data mining?

4 A. Analytics.

5 Q. Analytics.

6 A. So anywhere you see DMA, that's  
7 data mining analytics.

8 Q. Got it.

9 And there are four invoices that  
10 are dated May 31st, 2018.

11 Do you see that --

12 A. I think --

13 Q. -- far left column.

14 A. Yeah. It looks like the line  
15 items are entered, so just give me a  
16 second.

17 Q. Oh, right.

18 And these line items are all  
19 related to travel, correct?

20 A. Can I move this? Sorry.

21 (Document review.)

22 A. So the first four appear to be  
23 line items for travel, yes.

24 Q. And they reflect that there was a  
25 meeting on May 24th in D.C.?

1

2           A.     Correct.

3           Q.     Who was that meeting with?

4           A.     I don't recall specifically who  
5     was in the room. I remember it was at -- I  
6     remember meeting like Paul Farrell and some  
7     attorneys. Linda Singer of course was  
8     there. And then there is a lot of faces I  
9     don't remember or know.

10          Q.     A lot of other people, but you  
11     don't know who?

12          A.     Correct. It was --

13          Q.     How many people were there for  
14     that meeting?

15          A.     Oh, I couldn't guess. It was a  
16     room smaller than this for sure.

17          Q.     Less people than in this room  
18     today?

19          A.     Maybe the same but in a much  
20     tighter quarters.

21          Q.     Was anyone from DEA at that  
22     meeting?

23          A.     Like I said, I don't know who was  
24     exactly in that meeting. I didn't -- we  
25     didn't do like a check-in, but I don't

1

2 recall somebody being introduced as, hi,  
3 I'm so-and-so from the DEA.

4 Q. Did you understand that meeting  
5 to be -- were there any other experts in  
6 the meeting aside from you?

7 A. At that time, I wasn't even an  
8 expert, so I wouldn't have even known then  
9 who would have been an expert or was an  
10 expert.

11 Q. What did you do at the meeting?

12 A. So that was... if I recall, I  
13 think it was a preliminary meeting about  
14 the ARCOS data. I think we had just gotten  
15 maybe the first or second production about  
16 it and everyone kind of putting their heads  
17 together of what the heck is this and how  
18 do we use it.

19 Q. I don't see a hotel, so I would  
20 assume that was just a single  
21 there-and-back meeting?

22 A. Yeah, I specialize in those.

23 Q. So do I.

24 Okay. And then we see another  
25 set of line items underneath the travel

1

2       ones that are the next four entries in gray  
3       that are charges for data mining and  
4       analytics.

5                   Do you see that?

6           A.    Correct.

7           Q.    But the one right before we get  
8       to data mining and analytics says "air gap  
9       server for ARCOS."

10                   What is air gap server?

11           A.    So you'll see a couple charges  
12       throughout here that are just to charge for  
13       our server space.

14           Q.    Like the hosting fee?

15           A.    Exactly.

16           Q.    Because it's a ginormous amount  
17       of data?

18           A.    Yes.  It doesn't just sit  
19       somewhere for free if you want it to be  
20       super secure.

21           Q.    And then data mining and  
22       analytics reflect various numbers of hours  
23       and various billing rates.  One is \$250 an  
24       hour, one is 475 and one is 275.

25                   Do you see that?

1

2 A. Yes.

3 Q. 475 is you, correct?

4 A. That is me.

5 Q. You're the only person that bills  
6 at the 475 rate on these, on this matter?

7 A. I believe so, yes.

8 Q. Okay. So anywhere we see a 475,  
9 I can know that's work you did personally?

10 A. Correct.

11 Q. And those are your hours.

12 And then what is the difference  
13 between the 250 and the 275, just out of  
14 curiosity?

15 A. Our analysts are generally paid  
16 on the lower end of the scale. I don't  
17 know exactly the structure. The data  
18 scientists and the more senior staff, more  
19 senior than analysts, I should say, get  
20 paid at that 275.

21 Q. It's like a sliding scale of  
22 seniority?

23 A. Exactly.

24 Q. What are "investigative services"  
25 that are reflected on 6/22/2018 invoice?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. Yeah. So some of the earlier invoices when we were first setting up the firm, they just -- so the firm would bill everything as investigative services because it's all that they had and never bothered to change it to data mining and analytics. And you'll notice that that disappears after some point in time, probably in the fall where we open up the "own data mining" categories, because I wanted to have my own for tracking so...

Q. So here, it looks like the opposite to me, because it starts out being described as "data mining and analytics" in 5/31/2018, but then it changes to "investigative services" from their amount if you look down that. And sometimes it's called "U.S. jurisdiction."

But I think the 5/31/18 is the last time we see "data mining and analytics." Am I right about that?

A. I'd have to put them in order to look, but that's how the -- when I asked the billing team to put this together for

1

2       me, that's how it was described to me is at  
3       some point, the case was opened and called  
4       data -- investigative services and then at  
5       some point, it was data mining analytics.

6               I recognize that there's these  
7       three here that say "data mining and  
8       analytics" instead of "investigative  
9       services," but, again, this is from the DMA  
10      side of things, not from the investigation  
11      side of things.

12             Q.   And is there any substantive  
13      difference in what the people are doing  
14      when it's described as data mining and  
15      analytics versus investigative services?

16             A.   When it's on this paper, no.

17             Q.   Okay. As opposed to what?

18             A.   If there were -- as we talked  
19      earlier, Gryphon has two lines of -- or  
20      multiple lines of business, and we  
21      discussed the investigative side and not if  
22      the -- I can't speak to what their stuff is  
23      billed as, for example.

24             Q.   Okay. And so all the entries  
25      that have the description "investigative



1

2       services," those are people that are doing  
3       work with the data sets that are described  
4       in your report?

5           A.     Correct, you could understand  
6       them to be that.

7           Q.     What is DMA methodology and data  
8       overlays, what does that mean? DMA  
9       methodology and data overlays at the bottom  
10      of the first page of this exhibit, what  
11      does that mean?

12          A.     So that's the case where we -- if  
13      there is not a specific jurisdiction to  
14      bill that case towards -- so you'll notice  
15      some of these are for Summit County,  
16      Cuyahoga. At some point, those become  
17      Bellwether, et cetera. Methodology and  
18      data overlays are the analysis and work  
19      that we do that could touch multiple  
20      jurisdictions, right? So like a great  
21      example is the ARCOS data. There's a good  
22      chunk of time that goes into understanding  
23      it, processing it, filtering it, making  
24      sure that you're looking at the right  
25      thing, because it's not an easy thing to

1

2       just ingest.

3

4               Q.    So this, in the fourth column  
5       where we're talking about in reference to,  
6       that is how you know internally who pays  
7       which part of the bills? That's what that  
8       column is designed to help be used for?  
9       Whether it should be allocated to Cuyahoga,  
10      to Summit or is relevant to multiple  
11      analyses?

12

13              A.    Yeah, I guess the invoice is  
14      reflected as that. We actually view that  
15      as the case title when we're billing  
16      against it.

17

18              Q.    On the second page of Exhibit 9,  
19      at the top, there is an entry in the  
20      reference to column that says, "DMA Ohio  
21      5."

22

23                    What's that mean?

24

25              A.    So there were five counties in  
26      Ohio. Some of these are just shorthand,  
27      you know, we just call them internally, not  
28      thinking that they would ever been produced  
29      as exhibits. There were five counties that  
30      we were producing analysis on in Ohio, so

1

2       those were part of this.

3               Q.    And so those hours would be  
4       relevant to all five counties?

5               A.    Correct.

6               Q.    And I think I can guess what you  
7       would say if I looked down to "DMA  
8       Cleveland," that's relevant to work about,  
9       specific to Cleveland?

10              A.    Precisely.

11              Q.    And in the fifth column, which  
12       the heading in the column indicates that it  
13       came from the description part of your  
14       actual invoices, under "Description," on  
15       the top of page 2 where it says "United  
16       States," what does that mean?

17              A.    I have no idea. I asked our  
18       billing team why it says United States.  
19       Sometimes it says U.S. I don't know if  
20       it's to delineate whether or not it's a  
21       U.S. versus international investigation  
22       because they are an international firm.  
23       But as far as I'm concerned, it doesn't  
24       reflect anything for us.

25              Q.    Have you done any international

1

2 analysis in conjunction with this case?

3 A. No.

4 Q. Have you done any work for the  
5 United States of America as opposed to the  
6 Ohio counties in conjunction with this  
7 matter?

8 A. No.

9 Q. Under the project name, which is  
10 the third column, flipping through this  
11 document to page 4 of Exhibit 9, at the  
12 top, the first set of white ones, November  
13 of 2018, they say "labeler flagging."

14 What's labeler flagging?

15 A. That's the -- that's an analysis  
16 of flagging metrics similar to what's in  
17 the report here to labelers' data.

18 Q. Same question with "Bellwether  
19 follow-up" at the bottom of the page, what  
20 does that mean?

21 A. So, one, I've been informed that  
22 it's Bellwether without the A, so  
23 apologies. And then, two, at some point in  
24 time -- so we had been billing Summit and  
25 Cuyahoga separately, and the request to us

1

2       for analysis started grouping them more  
3       frequently, so we just pushed them into one  
4       case.

5           Q.     These invoices that you provided  
6       us in Exhibit 3 and that have been  
7       summarized in Exhibit 9, they cover a time  
8       period from May 31st, 2018, to May 30th,  
9       2019.

10                   Is that correct -- is that the  
11       correct time period for which Gryphon  
12       Strategies has actually billed for work on  
13       this matter?

14           A.     Correct. You know, we invoice  
15       monthly, so I don't know exactly at what  
16       point in May that I would have started on a  
17       case, but, yes.

18           Q.     And obviously you've done work in  
19       June, this month?

20           A.     Correct, yes. Those have not  
21       been --

22           Q.     Those have not been billed yet?

23           A.     Yes.

24           Q.     Do you know, as you sit here  
25       today, the amount of hours that you've put

1

2 in, in June?

3 A. No, I don't, but I'm sure they're  
4 somewhere similar as to what we've done in  
5 the past or so.

6 Q. Did the information contained in  
7 Exhibit 3 and summarized in Exhibit 9  
8 reflect the entirety of the work that  
9 you've don't in this case?

10 A. On this case, yes.

11 Q. Is there any work related to  
12 opioids for this litigation that you've  
13 done that's not reflected in these  
14 exhibits?

15 A. For this litigation, this is  
16 complete.

17 Q. What is the distinction you're  
18 drawing there? What would be incomplete?  
19 What other work that you've done that is  
20 not for this litigation?

21 MS. CONROY: Objection. That's  
22 actually beyond the scope, if that's  
23 what your question means.

24 BY MS. LEVY:

25 Q. I'm asking you, personally, what

1

2 work have you done that is not reflected in  
3 this litigation that relates to opioids?

4 A. So there are other cases around  
5 the country that I've done work on.

6 Q. Okay. Understood.

7 Have you done any work for free,  
8 pro bono?

9 A. Yes, but not on opioids.

10 Q. I meant with respect to this  
11 litigation.

12 Have you done any work with  
13 respect to opioids or this litigation under  
14 any organization other than Gryphon?

15 A. For this litigation, no.

16 Q. For other litigations, have you?  
17 For other cases in this litigation, have  
18 you billed through somewhere else other  
19 than Gryphon?

20 A. No.

21 Q. All of your work on opioids has  
22 gone through Gryphon Strategies?

23 A. I want to make sure I'm super  
24 clear. Because like we discussed earlier,  
25 I did work at the AG's office. Of course I

1

2       didn't bill for that. They're not part of  
3       this litigation. So that's what I'm  
4       struggling with, making sure that I say the  
5       right thing.

6             Q.    You haven't received any payment  
7       for your work on the opioid litigation that  
8       we don't see in these exhibits, correct?

9             A.    That's correct.

10            Q.    What is your compensation  
11       structure at Gryphon?

12            A.    We're all salaried.

13            Q.    What is your salary annually?

14            A.    180.

15            Q.    And is that -- the salary is the  
16       same regardless of what you bill?

17            A.    There is a salary and then there  
18       is a bonus at the end of the year.

19            Q.    How is the bonus calculated?

20            A.    I would love to know. But my  
21       boss decides what it is at the end of the  
22       year.

23            Q.    Did you get a bonus at the end of  
24       2018?

25            A.    I did.



1

2 Q. What was your bonus?

3 A. It was either 20 or 25,000 I

4 actually can't remember.

5 Q. And you don't know how it was

6 calculated?

7 A. No.

8 Q. Is it based on the amount that

9 you bill or the amount you bring in?

10 A. Yes and no. I don't really know

11 exactly. I've asked my boss for more

12 complete metrics. I am metric person.

13 Some of it is time with the firm, some of

14 it is billable, some of it is just a factor

15 X, I think.

16 Q. But you, Lacey Keller, are

17 getting paid 180,000 a year regardless of

18 what Gryphon is billing, correct?

19 A. Correct.

20 Q. Plus whatever bonus you get?

21 A. Correct.

22 Q. Got it.

23 And have you calculated how much

24 money Gryphon has brought in as a result of

25 the opioid litigation?

1

2           A.    No.

3           Q.    If I represent to you that your  
4           own hours total 470 hours over the course  
5           of the last year, does that sound about  
6           right to you?

7           A.    470 hours?

8           Q.    I'm sorry, 870 hours.

9           A.    That probably feels about right.

10          Q.    And are you aware that Gryphon  
11          Strategies has invoiced over a  
12          million-and-a-half dollars for work that  
13          you and your team have done on the opioid  
14          litigation for these particular matters?

15          A.    That probably makes sense.

16                MS. LEVY:   Okay.   I do not have  
17          any further questions for this witness.  
18          I will pass you along to the next  
19          co-defendant who wishes to be in this  
20          seat.

21                Let's go off the record for a  
22          minute so we can change questioners.

23                THE VIDEOGRAPHER:   The time is  
24          2:04 p.m.   We are now off the record.

25                (Recess is taken.)

1

2

THE VIDEOGRAPHER: The time is

3

2:18 p.m. We are now back on the

4

record.

5

EXAMINATION BY

6

MS. LUCAS:

7

Q. Good afternoon, Ms. Keller. I'm

8

Amy Lucas. I represent Janssen and J&J.

9

Can you turn to Exhibit 5, which

10

is your report, at page 6 and look at

11

paragraph 4, please?

12

A. Sure.

13

Q. It says, "The work I've done

14

throughout my career relates directly to

15

analysis undertaken in this report."

16

Is that accurate?

17

A. Correct.

18

Q. And you believe that, correct?

19

A. Correct.

20

Q. So if you take a look at

21

paragraph 6 down at the bottom, the second

22

sentence -- or the first about when you

23

were the at New York AG's office, the

24

second sentence says, "Frequently I was

25

given a subject area to investigate without

1

2       having any prior expertise in the area. I  
3       would then educate myself through research  
4       and talking with subject matter experts to  
5       allow me to help them identify new areas of  
6       investigation."

7                       Is that accurate?

8               A.     That is.

9               Q.     In circumstances where are you  
10       were given an area to investigate without  
11       having prior expertise in the area, why  
12       would you educate yourself through research  
13       and talking with subject matter experts?

14              A.     So that I can best do my job.

15              Q.     It's important to you to  
16       understand the subject area that you're  
17       working in, right?

18              A.     Of course.

19              Q.     And you wouldn't want to offer  
20       opinions in a subject area without doing  
21       the work to understand that subject area,  
22       right?

23              A.     Yes.

24              Q.     I think you said earlier that you  
25       did not consider yourself to have expertise

1

2 in the area of manufacturers'  
3 anti-diversion and suspicious order  
4 monitoring programs before you were  
5 retained in this matter; is that correct?

6 A. That is correct.

7 Q. And you also said earlier that  
8 you never worked at the DEA, correct?

9 A. That is correct, I never worked  
10 at the DEA.

11 Q. And other than speaking to  
12 someone at DEA regarding the ARCOS data,  
13 you hadn't spoken to anyone else at the  
14 DEA, correct?

15 A. That is correct.

16 Q. You've also never worked as a  
17 detective on a DEA task force, right?

18 A. That is correct.

19 Q. You've never investigated any  
20 doctor who was suspected of overprescribing  
21 opioids for purposes of bringing charges  
22 against that doctor, correct?

23 A. That is correct.

24 Q. You've never spoken to anyone who  
25 has investigated a doctor suspected of

1

2 overprescribing, correct, for purposes of  
3 bringing charges?

4 A. Not that I can recall right now.

5 Q. You have never worked on any  
6 investigation by any doctor by any state  
7 medical board related to suspected  
8 overprescribing, correct?

9 A. Correct.

10 Q. You've never spoken to anybody  
11 who does such investigations, correct?

12 A. I don't think I have, no.

13 Q. You have never managed a  
14 registrant's suspicious order monitoring  
15 program, correct?

16 A. That is correct.

17 Q. What did you do to educate  
18 yourself on manufacturers' anti-diversion  
19 and suspicious order monitoring programs in  
20 connection with your work in this matter?

21 A. I read documents through  
22 discovery, so their own protocols, all of  
23 which are in my reliance materials.

24 Q. And those are the documents cited  
25 in your report in your reliance materials,

1

2 correct?

3 A. Correct.

4 Q. Other than reading those  
5 documents, what else did you do to educate  
6 yourself on manufacturers' anti-diversion  
7 and suspicious order monitoring programs?

8 A. I reviewed some depositions.

9 Q. Which depositions did you review?

10 A. I wouldn't be able to recall from  
11 memory right now, but those are definitely  
12 in my reliance materials.

13 Q. Anything else?

14 A. I believe I already cited the  
15 Masters decision and things like that. So  
16 I believe that's all.

17 Q. Did you talk to any subject  
18 matter experts other than the one DEA  
19 employee regarding ARCOS data?

20 A. We might have random -- like  
21 there might have been one phone call, but I  
22 don't know that they would be subject  
23 matter experts in the area.

24 Q. Who was the phone call with that  
25 you have in mind?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. I remember having a call on a Saturday morning with someone who might have worked at the DEA, but I actually can't remember. It was like, you need to talk to this person, and we briefly discussed compliance metrics.

And I don't remember a ton of the details from the conversation other than I was particularly interested in grouping or not grouping by drug code. That's --

Q. What do you mean by that?

A. So when you're applying compliance metrics, you can choose -- some of them call for applying certain drug codes. So a great example is the 8,000 rule, right? It says it should only apply to hydrocodone and a few other ones. And so that hydrocodone would be considered its own drug code or drug grouping.

And so when applying other compliance metrics, did it make sense or not make sense, depending on the metric, to group by a drug code if there is any ambiguity in the documentation.



1

2           Q.    And what did -- this person was a  
3           current DEA employee?

4           A.    I believe a former.

5           Q.    And what did this person say?

6           A.    I don't really recall because it  
7           didn't really change how we were going to  
8           do it. I think, if I recall, there was  
9           some hedging of, well, it could be this or  
10          it could be that, so we just continued with  
11          exactly how we had planned.

12          Q.    Other than asking a former DEA  
13          employee about grouping by drug code for  
14          compliance metrics, have you had any other  
15          conversations with any subject matter  
16          experts regarding your work in this matter?

17          A.    Not that I can recall at this  
18          time.

19          Q.    How long did that call last?

20          A.    Oh, less than an hour for sure.

21          Q.    And when was that call?

22          A.    I don't recall the exact date.

23          Like I said, I remember it being a Saturday  
24          morning because I remember walking my dog  
25          while I was on the call.

1

2           Q.    Do you know what makes an order  
3           reportable to the DEA as a suspicious  
4           order?

5           A.    No, I do not.  As we discussed  
6           earlier, outside of my expertise.

7           Q.    Do you know whether DEA expects  
8           registrants to conduct due diligence into  
9           flagging orders -- into flagged orders to  
10          determine whether they're actually  
11          suspicious before reporting it?

12          A.    Again, as discussed earlier,  
13          outside of my expertise.

14          Q.    Did you ever discuss whether  
15          to -- strike that.

16                    Did you ever discuss whether to  
17          consider due diligence in running the  
18          metrics that you ran?

19          A.    So --

20          Q.    Let me start over.

21                    You said earlier that in your  
22          report, if something is suspicious, you  
23          mean it just was tripped by one of the  
24          metrics, right?

25          A.    That is correct.

1

2           Q.    And just because you used the  
3           word "suspicious" in your report, that  
4           doesn't mean it's suspicious as the DEA  
5           defines under the Controlled Substances  
6           Act, correct?

7           A.    That's accurate.

8           Q.    So did you ever consider whether  
9           you should take due diligence into account  
10          in creating your definition of suspicious?

11          A.    So I'm pausing for this because  
12          there's the addendum that does the  
13          persistent flagging which assumes no due  
14          diligence because once the flag is  
15          triggered, it stays on for the perpetuity  
16          of the data set.

17                        So in the sphere that is around  
18          that, then, yes. And if we're talking  
19          about anything outside of that, then no.

20          Q.    Are you aware whether -- strike  
21          that.

22                        Did you look at any documents or  
23          deposition testimony regarding Janssen's  
24          due diligence of flagged orders?

25          A.    I might have read a document or

1

2       two. But, again, evaluating due diligence  
3       or any of that is outside of the scope of  
4       my expertise.

5           Q.     So even if you evaluated it, you  
6       would not have incorporated any documents  
7       related to Janssen's due diligence of its  
8       flagged orders into your opinions?

9           A.     I think the answer to that would  
10      be yes. If I read a document, it doesn't  
11      impact the findings of the report. The  
12      report was to apply the known compliance  
13      metrics to labelers on data.

14          Q.     I want to ask you about the known  
15      compliance metrics.

16                  Do you know what -- strike that.

17                  A compliance metric is the same  
18      way of saying an algorithm, right?

19          A.     Sure.

20          Q.     Okay. The SOMS algorithm, do you  
21      know what Janssen used for its suspicious  
22      order monitoring algorithm?

23          A.     If it's not in my report, then  
24      no. Or if it's in my report, then, yes.  
25      But if it's not in my report, then, no.

1

2 But I don't believe that we had a Janssen  
3 algorithm.

4 Q. I'll represent to you we haven't  
5 found one.

6 Why is it that you didn't use  
7 Janssen's suspicious order monitoring  
8 algorithm or compliance metric in your  
9 report?

10 A. If it's not here, then, which I  
11 don't think it is, I didn't know of it. So  
12 if there was one, I'd be happy to implement  
13 it.

14 Q. How did you choose the compliance  
15 metrics that got included in the report?

16 A. As we were stating earlier, some  
17 were provided by counsel, others we found.

18 Q. So there was no instruction by  
19 anyone to make sure you included all of the  
20 defendants' algorithms in your report?

21 A. Well, I would say that's correct,  
22 there was no explicit instruction to  
23 include all or exclude all, include what  
24 you could find and go from there.

25 Q. Is it your understanding that

1

2       nobody could find Janssen's suspicious  
3       order monitoring algorithm?

4           A.    I just wanted to look at one  
5       thing really quick.

6                   (Document review.)

7           Q.    What page are you on?

8           A.    I'm trying to find it.   I'm  
9       sorry.

10          Q.    Are you looking for the metrics?

11          A.    Yeah.  I'm looking actually for  
12       the footnote about Janssen that describes  
13       the SOMS program.

14                   (Document review.)

15          A.    Because as I understood it, there  
16       wasn't one to implement.  But I just...  
17       that's what I wanted to review.

18                   (Document review.)

19          A.    So, yes, it was my understanding  
20       that there wasn't a metric.

21          Q.    It was your understanding?

22          A.    Correct.

23          Q.    Did you ask anybody to confirm  
24       that?

25          A.    I did.

1

2 Q. Who did you ask?

3 A. Evan Janush, I think is his last  
4 name. J-a-n-u s-h.

5 Q. And your understanding is that  
6 Mr. Janush told you that Janssen did not  
7 have a suspicious order monitoring  
8 compliance metric or algorithm?

9 A. Correct, that we could implement,  
10 yes.

11 Q. Did you find that footnote?

12 A. Yes. I was on page 28 here.  
13 Footnote 83 is what I was looking for just  
14 to make sure.

15 Q. And footnote 83 says, "Janssen  
16 used chargeback and value track data on  
17 occasion for size only."

18 Is that what you were thinking  
19 of?

20 A. That is exactly what I was  
21 thinking of.

22 Q. And what makes you think that  
23 that supports the notion that Janssen did  
24 not have a suspicious order monitoring  
25 algorithm?

1

2           A.     So in some of these footnotes, we  
3     cite when SOMS programs were developed and  
4     what Bates numbers support those  
5     development. And I wanted to make sure  
6     that Janssen didn't have one.

7           Q.     Are you aware that -- have you  
8     ever spoken to James Rafalski?

9           A.     I might have, but I'm not sure.

10          Q.     Have you read his report?

11          A.     Yes.

12          Q.     You're aware that he's a  
13     plaintiff's expert in this case?

14          A.     Yes.

15          Q.     And are you aware that he  
16     evaluated Janssen's suspicious order  
17     monitoring program and, in particular, the  
18     algorithm that Janssen used?

19          A.     If it was part of his report,  
20     then it would have been, yes.

21          Q.     And so if you read his report and  
22     you understood that, then why is Janssen's  
23     suspicious order monitoring algorithm not  
24     part of your report?

25                   MS. CONROY: Objection.



1

2           A.    I believe his report was filed at  
3           the same time ours was.

4           Q.    And so you learned that Janssen  
5           had a suspicious order monitoring algorithm  
6           after your report was already in?

7           A.    Do you have Rafalski's report?  
8           I'd like to review it just to make sure  
9           that I know --

10          Q.    I don't.

11          A.    So I don't know what algorithm  
12          was discussed. I mean, his report was  
13          quite lengthy, if I recall. And so I'd  
14          have to look at it to know exactly what the  
15          algorithm was.

16          Q.    But if you would have had the  
17          algorithm, you would have incorporated it  
18          into your report; is that correct?

19          A.    Absolutely.

20                MS. CONROY: Objection.

21          BY MS. LUCAS:

22          Q.    What are the Janssen products at  
23          issue in this litigation?

24          A.    I don't know that I can name them  
25          by name. It would be anything that

1

2 appeared in the IQVIA data or your own  
3 chargeback data.

4 Q. If you can take a look at page  
5 14, paragraph 44.

6 (Witness complies.)

7 Q. "I implemented the manufacturer  
8 and distributor-developed compliance  
9 metrics as documented without endorsement."

10 What does that mean to you?

11 A. That means what we were stating  
12 earlier on the record about I'm not  
13 endorsing saying one metric is better than  
14 another.

15 Q. "I implemented the metrics using  
16 a close reading of the best information  
17 available for produced documents and  
18 instruction by counsel, providing the most  
19 accurate reflection of labeler defendants'  
20 monitoring programs as they were  
21 represented in their own operating  
22 procedures and documentation."

23 What does that mean?

24 A. Sure.

25 So when you're reading a metric,

1

2       sometimes people explain -- you know, it  
3       may say take the 30 day average. Well,  
4       what does that mean? Does that mean a  
5       rolling 30 day or calendar 30 day?

6               So, you know, what I'm trying to  
7       encapsulate there is there might be -- you  
8       know, we're trying to do the best that we  
9       can, given the documents, to implement them  
10      to their truest meaning based off of  
11      testimony, depositions, the documents  
12      themselves. That's what I'm trying to  
13      represent there.

14             Q.    So what you did, though, here was  
15      you implemented metrics that Janssen didn't  
16      use, correct?

17             A.    I couldn't speak to whether  
18      Janssen did or did not use a metric.

19             Q.    Do you have any reason to believe  
20      that Janssen used any of the metrics listed  
21      in your report?

22             A.    I wouldn't know.

23             Q.    Let me ask it again.

24                    Do you have any reason to believe  
25      that Janssen used any of those metrics

1

2 listed in your report, yes or no?

3 MS. CONROY: Objection.

4 A. It's really outside the scope of  
5 my expertise.

6 Q. You haven't seen any information  
7 to suggest that Janssen used any of those  
8 metrics, correct?

9 A. I have not read a document that  
10 led me to believe that, correct.

11 Q. Therefore, since you didn't use  
12 Janssen's algorithm in your report, you  
13 don't have any opinion on what Janssen's  
14 algorithm would or would not have flagged,  
15 correct?

16 A. That is correct. And I would  
17 like to know, just so if we're going to  
18 continue to talk about an algorithm, maybe  
19 what it was, so I can be a little bit more  
20 informed.

21 Q. One of the great things about  
22 deposing people is I get to ask the  
23 questions. Your counsel can provide that  
24 to you afterwards.

25 MS. CONROY: Objection. Assumes

1

2           that it exists.

3                   MS. LUCAS: I think Mr. Janush

4           knows about our -- Janssen's algorithm.

5 BY MS. LUCAS:

6           Q.    So I wanted to talk about your  
7           small labeler opinion.

8                   And that applies only to Janssen,  
9           correct?

10           A.   That is correct.

11           Q.   And why is that?

12           A.   So small labeler, I don't mean  
13           any offense to that because I understand  
14           Johnson & Johnson is a very large company,  
15           but when it comes to opioids, you have very  
16           few as it pertains to the market share,  
17           right? You're a much lower market share.

18           Q.   Actually, if you want to turn  
19           really quickly to page --

20           A.   16 you're probably looking for.

21           Q.   I am.

22                   Page 16, table 1 and table 2.

23           That reflects Janssen's market share in  
24           Summit County and Cuyahoga County, correct?

25           A.   Yes.

1

2           Q.    And the largest percentage on  
3           that table is 0.9 percent, and the smallest  
4           one is 0.1 percent, correct?

5           A.    That appears to be correct.

6           Q.    Did you calculate those numbers?

7           A.    I didn't do it by hand, but an  
8           algorithm did.

9           Q.    How did you do that?

10          A.    SQL query.

11          Q.    And you concluded that Janssen  
12          had between 0.1 percent and 0.9 percent  
13          market share in Summit and Cuyahoga,  
14          correct?

15          A.    Yes, depending on the metric and  
16          depending on the county.

17          Q.    And other manufacturers, either  
18          defendants or otherwise not named in the  
19          complaints, had between 99.1 and 99.9  
20          percent of the market share, correct?

21          A.    Yes. I'm assuming you're taking  
22          the hundred minus yourselves and that's  
23          everybody else, yes.

24          Q.    So then back to your small  
25          labeler opinion, why then did you conduct

1

2       the small labeler impact analysis as to  
3       Janssen?

4           A.    It was asked of me to see what  
5       would happen if -- again, this is a  
6       hypothetical scenario. And let me just  
7       flip to there just so I'm on the right  
8       page.

9                   Do you have it.

10          Q.    Small labelers starts on page 53.

11          A.    Thank you so much.

12                   (Document review.)

13          A.    So it would be if a labeler, like  
14       yourselves, had identified a suspicious  
15       physician -- and when I say identified  
16       suspicious, I mean using the metrics -- and  
17       then flagged them and reported them and  
18       they were taken off-line completely, what  
19       would be the downstream impact of that.

20          Q.    And why did you conduct that  
21       analysis?

22          A.    It was requested.

23          Q.    Who requested it?

24          A.    Linda Singer.

25          Q.    When did she request that you do

1

2 the small labeler analysis?

3 A. At some point in March or April.

4 Q. Did you have any input into the  
5 methodology of the small labeler impact  
6 analysis?

7 A. Of course.

8 MS. CONROY: Objection.

9 BY MS. LUCAS:

10 Q. What exactly were your  
11 instructions from Ms. Singer, to the best  
12 of your recollection?

13 A. I would say pretty much as  
14 written was it's a hypothetical scenario,  
15 assuming that, let's say, a physician is  
16 flagged, he then or she was reported and  
17 taken off-line for the duration of his or  
18 her prescribing habits or prescribing  
19 history, I should say. How we went about  
20 doing that was on our own.

21 And even --

22 Q. So let me just make sure I  
23 understand. You were instructed to work  
24 backwards from a hypothetical scenario  
25 where a physician is flagged and reported



1

2           and taken off-line and then figure out how  
3           to create that methodology?

4                       MS. CONROY: Objection.

5           A.    I'm not sure I would characterize  
6           it that way. We were given an assignment  
7           of someone is -- a physician is flagged and  
8           then there is, you know, a lot of things  
9           that have to come after that, but assuming  
10          once they've been flagged, they're taken  
11          off-line, what is the impact on the rest of  
12          the county.

13          Q.    You said a lot of things have to  
14          happen after the flagging.

15                       What are those things that have  
16          to happen after a physician is flagged?

17          A.    So like I said earlier, I'm not  
18          an expert in due diligence or reporting  
19          requirements to the DEA.

20                       So with that in mind, to make  
21          this work, I had to make the assumption  
22          that once flagged, they stopped  
23          prescribing.

24          Q.    At the moment the flagging  
25          happened; is that correct?

1

2           A.    I believe so, yes.  I'd have to  
3   look at the code to be for certain.

4           Q.    So in order for this analysis to  
5   work, you had to assume that the prescriber  
6   was taken off-line the moment the metrics  
7   used were tripped and there was a flag,  
8   correct?

9           MS. CONROY:  Objection.

10          A.    I would say for this hypothetical  
11   situation to present itself, yes, once  
12   someone was flagged and they were taken  
13   off-line, what their, what amount of  
14   prescriptions were then taken off-line.

15                I'm trying to say it the best way  
16   I can.  I'm sorry if I'm not being clear.

17          Q.    Do you believe that your small  
18   labeler impact opinion is an accurate  
19   representation of what happens in the real  
20   world?

21          A.    I'm not really an expert to say  
22   that.

23          Q.    Do you have any beliefs on  
24   whether it's an accurate representation of  
25   what would happen in the real world?

1

2           A.   Any beliefs? Outside of my  
3 expertise here.

4           Q.   You haven't considered it at all?

5           A.   Not as an expert.

6           Q.   As a non-expert?

7           A.   I mean, of course you think about  
8 things, but I'm not here to talk about  
9 those.

10          Q.   What do you think about it?

11          A.   I mean, I think it's a -- I  
12 guess, I mean it's like you give it  
13 fleeting thoughts of like -- I don't even  
14 really know how to talk about like random  
15 thoughts that you have like while riding a  
16 bicycle on the way to work about things.  
17 Like, you know, I'm thinking about my small  
18 labeler impact; I don't really carry it  
19 down the logical path of, well, does due  
20 diligence actually happen or does this  
21 actually happen. I don't go into that  
22 great detail. So maybe it was a  
23 mischaracterization to say do I think about  
24 it. I don't know. I've kind of walked  
25 myself into --

1

2

Q. Well, if you want to go back to

3

page 11, paragraph 34: "I was asked by

4

plaintiff's counsel to include additional

5

analysis that examined what would have

6

happened if a labeler with a comparatively

7

small market share had reported and stopped

8

supplies to suspicious prescribers.

9

"I demonstrated that if Janssen,

10

the defendant labeler with the second

11

smallest market share in Summit and

12

Cuyahoga Counties, had reported suspicious

13

activity, prescriptions for millions of

14

dosage units could have been stopped in

15

Summit and Cuyahoga Counties."

16

That's very definitive. Do you

17

believe that is an accurate statement?

18

A. It's a hypothetical situation.

19

As we discussed in that section, it's a

20

hypothetical analysis.

21

Q. Right, but paragraph 34 says you

22

were asked to examine what would have

23

happened.

24

Are you saying now that your

25

small labeler opinion is not a statement of

1

2       your opinion of what would happen?

3

4           A.    So I would say that the change  
5       that we made earlier in the corrections  
6       where we went from "would" to "could,"  
7       those should have been throughout. I  
8       didn't really get to talk about every  
9       single change here. But, again, these are  
10      "could" statements, and I think we stated  
11      that pretty definitively in the first part  
12      of this deposition.

13           Q.    Right. I asked because I noticed  
14      that the corrections didn't apply to this  
15      paragraph. And so you are now saying that  
16      you meant to say "could" have happened?

17           A.    I would be most comfortable with  
18      saying "could."

19           Q.    And "could" means that it's  
20      feasible, correct?

21           A.    I think that's what that word  
22      means, yes.

23           Q.    Do you believe that your small  
24      labeler impact opinion is feasible in the  
25      real world?

26           A.    I'm not here -- I won't talk

1

2       about real world. It's outside of my  
3       expertise.

4           Q.    So you're not offering any  
5       opinion about whether your small labeler  
6       impact opinion could happen in the real  
7       world, right?

8           MS. CONROY:  Objection.

9           A.    So I think we've said here that  
10      this was what could happen. I'm not  
11      offering an opinion about what would happen  
12      or should happen.

13          Q.    Right.

14                But you're also not offering an  
15      opinion about what could happen as applied  
16      in the real world, right?

17          A.    I guess I'm not really  
18      understanding the difference between that  
19      question and the one that I just answered.

20          Q.    Well, because you said this is  
21      all hypothetical.

22          A.    Sure, but it relies on real-world  
23      data.

24          Q.    Which data?

25          A.    The IQVIA data.

1

2           Q.    It is then your opinion that this  
3           could happen in the real world, correct?

4           A.    It seems a little... it's a lot  
5           of time to spend on a hypothetical, but,  
6           yes, if all of the assumptions that were  
7           outlined in the report that the labeler was  
8           -- or that the labeler identified the  
9           prescriber and that all the different steps  
10          were taken to take them off-line, then,  
11          yes, it could happen in the real world.

12          Q.    Well, the only two assumptions I  
13          think I heard were that one of the metrics  
14          was tripped and a flag went up, correct?

15          A.    That is one part of the  
16          hypothetical.

17          Q.    And Janssen would report that  
18          prescriber to law enforcement as  
19          suspicious, right?

20          A.    So as part of the hypothetical,  
21          they would be tripped, Janssen could report  
22          them. That prescriber, through whatever --  
23          or they could be reported, or they could  
24          stop prescribing, whatever the means are to  
25          get them to stop prescribing.

1

2

But the whole point of the

3

analysis is that that prescriber who was

4

flagged then stops prescribing. I don't

5

really claim or really fill out the blanks

6

between what gets from A to B.

7

Q. You said that your assumption is

8

that the prescriber would stop prescribing

9

immediately upon the metric being tripped,

10

right?

11

A. Correct.

12

Q. Do you have any basis to believe

13

that those assumptions would happen in the

14

real world?

15

A. It's really outside of my

16

expertise.

17

Q. You don't know?

18

A. I don't know.

19

Q. Have you ever thought when you

20

were thinking about this analysis whether

21

it was flawed?

22

MS. CONROY: Objection.

23

A. I think --

24

MS. CONROY: Which analysis? The

25

hypothetical you're talking about or --



1

2

MS. LUCAS: Her small labeler

3

analysis.

4

MS. LEVY: Okay. I just want --

5

it's a pretty broad question.

6

MS. LUCAS: The report, no.

7

We've been talking about the small

8

labeler. Let me ask it again.

9

BY MS. LUCAS:

10

Q. You said earlier that, you know,

11

sometimes you thought about the analysis

12

and the small labeler impact.

13

Did you ever think that it was

14

flawed?

15

A. No. But I will say I always

16

think about where things could go wrong.

17

That's the point of being a good analyst

18

and data scientist. It's always are we

19

looking for the right things, have we

20

applied things correctly, are we making

21

conservative assumptions.

22

Q. Where do you think things could

23

have gone wrong in the small labeler

24

analysis?

25

A. So the whole hypothetical I think

1

2       is maybe what's at issue here. That's the  
3       hypothetical situation that I was asked to  
4       enact, so that is what it is.

5           Q.    Do you think there is anything  
6       that could have gone wrong in the small  
7       labeler analysis in the assumptions that  
8       you were making?

9                    You just said "I want things to  
10      be accurate."

11                   Do you think this is accurate?

12           A.    I think it is an accurate  
13      implementation of the hypothetical  
14      situation that we were asked to enact.

15           Q.    We'll come back to this one in a  
16      minute.

17                   I want to talk about chargeback  
18      analysis for a moment.

19                   Can you take a look at page 59  
20      and table 35.

21                   (Witness complies.)

22           Q.    And I think we said -- you said  
23      earlier that you changed -- table 35 is the  
24      use of chargeback data for compliance,  
25      right?

1

2           A.     Correct.

3

4           Q.     And you changed in your  
5           corrections the Endo, Par and Qualitest nos  
6           in that far right column of whether they  
7           used chargeback in suspicious order  
8           monitoring program from "no" to "yes." But  
9           Johnson & Johnson and Janssen is listed as  
10          no without any citation.

11                         Why is that?

12          A.     So it's hard to cite to a  
13          document that I don't have. If there was a  
14          "yes," then there would be a document to  
15          cite to.

16          Q.     And did somebody tell you to  
17          assume "no" for these purposes?

18          A.     I was told, and I think reflects  
19          similarly in the footnote earlier that we  
20          discussed, maybe it was 83.

21                         Give me one second.

22                         (Document review.)

23          Q.     Well, let me ask you a different  
24          way.

25                         When you say "suspicious order  
                       monitoring program," are you talking about

1

2           only the algorithm?

3           A.    Yes, I think that would be a

4           better characterization.

5           Q.    So you're excluding from

6           suspicious order monitoring program, any

7           follow-up due diligence that the suspicious

8           order monitoring department did when an

9           order was flagged, right?

10           MS. CONROY:  Objection.

11           A.    Yeah, I would say that's outside

12           of the scope.  So to the extent that there

13           was an algorithm that we could implement

14           and chargebacks were used as part of that

15           algorithm, then they get the "yes" here.

16           Q.    Got it.

17           And so...

18           (Document review.)

19           Q.    All right.  Take a look at page 4

20           of the --

21           MS. LUCAS:  Do we have the errata

22           sheet marked?

23           MS. CONROY:  Yes.

24           MS. LUCAS:  From 5/11?

25           Has this been marked?

1

2

MS. VENTURA: No.

3

(Keller Exhibit 10, Expert

4

Analysis - Errata Sheet: Lacey R.

5

Keller, not Bates-stamped, marked for

6

identification, as of this date.)

7

BY MS. LUCAS:

8

Q. If you look at page 4, table 4.

9

MS. CONROY: Do you have another

10

copy?

11

MS. LUCAS: Sure. I'm sorry,

12

Jayne.

13

BY MS. LUCAS:

14

Q. This identifies a number of

15

pharmacies flagged by running your

16

compliance metrics over each labeler's

17

chargeback data, correct?

18

A. Sorry. Give me one second.

19

(Document review.)

20

A. Yes.

21

Q. And for Janssen, it says total

22

buyers 12.

23

Does that mean total buyers in

24

all or total buyers in the chargeback data?

25

A. That would be total buyers that

1

2 appeared in the chargeback data.

3

Q. And for seven of them, you say  
4 that seven were flagged by any metric,  
5 correct?

6

A. Sorry, just a second. I just  
7 want to make sure.

8

So your question earlier, it says  
9 total buyers, 12. Yes, total buyers in the  
10 chargeback data. And then seven of which  
11 were flagged by any metric.

12

Q. Did you do any research yourself  
13 to determine whether any of those buyers  
14 were actually suspicious?

15

MS. CONROY: Objection.

16

A. That would be outside of the  
17 scope of my expertise.

18

Q. And if you take a look back at  
19 your report in Exhibit 5 at page 28, table  
20 6, this is about IQVIA data.

21

I want to confirm what I think is  
22 going to be the case based on what you just  
23 told me.

24

In paragraph 80, it says,

25

"Janssen discusses using IQVIA data for

1

2       one-off investigations of suspicious  
3       activity."

4                   There's no citation there. What  
5       is the basis for that statement?

6                   (Document review.)

7           A.    If it's not in my reliance, then  
8       it would have been from an attorney.

9           Q.    And the reason that you have "no"  
10       listed in the table, whether Janssen used  
11       IQVIA data for compliance, is because you  
12       were considering only the algorithm,  
13       correct?

14          A.    Yes. And now that I'm thinking  
15       about this, this citation here, chargeback  
16       and value track should really -- that  
17       citation makes more sense on the table  
18       later in the document.

19                   But again, yes, if there is an  
20       algorithm that would have referenced using  
21       IQVIA data in some way, that's the  
22       intention of giving a "yes" there.

23          Q.    Do you believe the IQVIA data  
24       that forms the basis of part one of your  
25       report, the prescriber opinions, is

1

2           accurate?

3                   A.    I have to assume that it is.

4                   Q.    Is it important that that data be  
5           accurate?

6                   A.    Yes.

7                   Q.    If the IQVIA data turned out to  
8           not be accurate, would that potentially  
9           affect your opinions?

10                   MS. CONROY:  Objection.

11                   A.    It really would depend on the  
12           error or what might be considered accurate.  
13           As we were talking earlier, the data was  
14           thought to be missing 2007.  The inclusion  
15           of that would lead to a potentially  
16           additional flagging.

17                   So depending on characterization,  
18           that could be accurate/inaccurate.  You  
19           know, that's a term of art, so it really  
20           depends.

21                   MS. LUCAS:  I'm going to mark  
22           this Exhibit 11 an FDA report stating,  
23           "FDA reports quality problems for data  
24           provided by the firm IQVIA that were  
25           used to inform estimates for some



1

2 controlled substances."

3 (Keller Exhibit 11, Press release  
4 entitled "FDA reports quality problems  
5 for data provided by the firm IQVIA  
6 that were used to inform estimates for  
7 some controlled substances", marked for  
8 identification, as of this date.)

9 BY MS. LUCAS:

10 Q. Have you seen this document  
11 before?

12 A. This document, no, but I do  
13 remember reading the press release when it  
14 came out.

15 Q. And when did you review the press  
16 release? In May of 2008?

17 A. 2018, I believe.

18 Q. I'm sorry, 2018.

19 And did you have any concerns  
20 when you read this report about IQVIA data  
21 inaccuracies when you read it in 2018?

22 A. I mean, it really depends on  
23 which data set. IQVIA offers many.

24 Q. Did you ever ask anyone whether  
25 the data set that you had might be subject

1

2 to the inaccuracies that are reported in  
3 this press release?

4 A. I mean, the data set was provided  
5 by Allergan. We did not purchase it.

6 Q. Do you know where Allergan got  
7 the data set?

8 A. I do not. But I assume that it's  
9 IQVIA.

10 Q. Did you ever ask anyone, though,  
11 whether anybody had checked to see whether  
12 the data set suffered from the same  
13 inaccuracies that are in this report in  
14 Exhibit 11?

15 A. I need to review the inaccuracies  
16 here before I answer that.

17 (Document review.)

18 Q. Well, it says, "While conducting  
19 analyses," this is fourth paragraph, "While  
20 conducting analyses to estimate the amount  
21 of prescription opioids sold in the U.S.,  
22 FDA found a discrepancy in the IQVIA data  
23 that showed a more than 20 percent drop in  
24 the reported amount expressed in kilograms  
25 of Fentanyl sold for a minimum of the past

1

2       five years compared to what IQVIA's  
3       database had previously reported."

4               Is that something that would have  
5       been relevant to your analysis?

6               A.    It really depends on what data  
7       set's impacted, whether or not the data set  
8       was purchased prior to or after this.  
9       There's lots of factors that could go into  
10      that.

11              Q.    And did you ask anyone whether  
12      the data set you had might be affected by  
13      this inaccuracy?

14              A.    I really just needed to take the  
15      data set as it was presented.

16              Q.    Is that a no?

17              A.    Yes. Yes, that is a no, to make  
18      that clear.

19              Q.    And then if you look at the  
20      second to last paragraph of the document,  
21      third to last says, "Since the FDA  
22      identified these issues, our scientists  
23      have been looking methodically at the  
24      IQVIA data for similar errors relating to  
25      other opioids and non-opioid controlled

1

2 substances."

3

And then the next paragraph says,

4

"As a result of this work, we identified

5

additional data quality issues related to

6

several other controlled substances with

7

similar weight-based conversion factors

8

including oxymorphone and hydrocodone.

9

These additional errors raised serious

10

concerns about systemic issues with IQVIA's

11

data and quality control procedures."

12

Is that something that you would

13

want to know, whether these errors affected

14

the data set you were working on?

15

A. I would definitely like to know

16

the extent of the errors, what particular

17

NDC codes they affected and whether this

18

data set would be affected. But, again,

19

there's lots of unknowns here, which data

20

set. Is at the IQVIA XPO or other data

21

sets.

22

Q. So it would be important to know

23

if the data set you were working with was

24

affected by these errors, correct?

25

MS. CONROY: Objection.

1

2 A. Yes.

3 Q. I want to go back through --

4 MS. CONROY: Is this a good time  
5 for a break? We've been going for  
6 about an hour. Is this a good time for  
7 a break if we finished with this  
8 document?

9 MS. LUCAS: Yeah, we can take a  
10 short break.

11 THE VIDEOGRAPHER: The time is  
12 3:05 p.m. We are now off the record.

13 (Recess is taken.)

14 THE VIDEOGRAPHER: The time is  
15 3:23 p.m. We are back on the record.

16 BY MS. LUCAS:

17 Q. Ms. Keller, can you take a look  
18 at page 30 of the report at Exhibit 5 and  
19 look at table 9?

20 (Witness complies.)

21 Q. It's the total prescriptions  
22 flagged by compliance metrics by labeler.

23 A. Yup.

24 Q. Then it lists the manufacturers  
25 and the number of prescriptions that were

1

2       flagged by the different standards and then  
3       any flag.

4                   Do you see that?

5           A.    Yes.

6           Q.    Did you ever consider what  
7       percentage of prescriptions were being  
8       flagged by these metrics in relation to the  
9       total number of prescriptions for each  
10      manufacturer?

11          A.    It doesn't appear to be one of  
12      these tables, but it would be possible to  
13      pull.

14          Q.    Did you consider it?

15          A.    I don't remember if I pulled that  
16      exact breakdown, but it's definitely a way  
17      that you can pull the data.

18          Q.    Do you know about what percentage  
19      of the prescriptions were flagged?

20          A.    By each metric?   Yes.   That's on  
21      table 7.

22          Q.    No, by prescriber.

23          A.    By each prescriber?

24          Q.    Right.

25          A.    So we do that --

1

2           Q.    Or, sorry, by labeler.  Strike  
3           that.

4                   Do you know each labeler, what  
5           percentage of their prescriptions were  
6           being flagged?

7           A.    Not with me, no.

8           Q.    Do you have any opinions on what  
9           percentage of doctors in the Cuyahoga and  
10          Summit County areas were prescribing  
11          irresponsibly?

12          A.    No.  I stated earlier in  
13          testimony today, that's outside of my  
14          expertise.

15          Q.    I have a few more questions about  
16          your small labeler impact opinions, if you  
17          want to go back to page 53.

18          A.    Thank you.

19                   (Document review.)

20          Q.    I wanted to confirm, in your  
21          small labeler analysis, were doctors  
22          flagged for their prescriptions of Janssen  
23          products only or did you flag a doctor  
24          based on number of non-Janssen  
25          prescriptions so long as that doctor

1

2       prescribed any Janssen product?

3               A.     Give me one moment to re-review  
4       the methodology here.

5                       (Document review.)

6               A.     So I'd have to look at the code  
7       to make sure I'm saying this most  
8       accurately, and I would be happy to do  
9       that, but I think what we did was you had  
10      to have six months of consecutive  
11      prescribing Janssen products first. And  
12      then once you reached that threshold, you  
13      were then flagged. And I think we say  
14      here, in paragraph 114, that we used  
15      Janssen drugs as well as everybody else's.

16              Q.     Where do you see that?

17              A.     The very last statement. Oh,  
18      hang on, actually. Maybe I am misstating  
19      that. Give me one second.

20              Q.     Okay.

21                       (Document review.)

22              A.     I don't know that we actually  
23      specifically addressed whether we flagged  
24      them based off of all drugs or just Janssen  
25      products. I'd have to consult the code to



1

2       be for certain.

3               Q.    Let's quickly run through the  
4       code.   Exhibit 12.

5                       (Keller Exhibit 12, Report on  
6               Script.SQL, not Bates-stamped, marked  
7               for identification, as of this date.)

8       BY MS. LUCAS:

9               Q.    If you can take a look at page 7  
10       through 12.   Pages 7 -- starting at the  
11       middle where it says "drop table" through  
12       page 12 that ends kind of towards the  
13       middle-ish where it says "B, year" and then  
14       the next word is "select," that's our  
15       understanding of the small labeler  
16       analysis.

17                       Could you confirm that, please?

18                       (Document review.)

19               A.    Sorry, dense code.

20                       (Document review.)

21               A.    Yes, this appears to be the small  
22       labeler analysis.

23               Q.    And by looking at this analysis,  
24       does that tell you whether or not doctors  
25       were flagged based on Janssen prescriptions

1

2 or all labelers' prescriptions?

3 A. It will, but I have to find it.

4 Sorry.

5 (Document review.)

6 A. So what this appears to me is  
7 that Janssen -- so you first have to  
8 prescribe a Janssen product for six months.  
9 And after that point, the first flag that  
10 you're flagged on is the flag no matter  
11 what the labeler is.

12 Q. Where do you see that in the  
13 code?

14 A. It's through a series of steps.  
15 So first there is a chunk of code that  
16 identifies the first date of flagging. And  
17 there is a chunk of code with a bunch of  
18 nested queries.

19 Q. What page are you on, 7?

20 A. I start on 7.

21 It's actually really hard to read  
22 formatted this way, so I'm sorry. It's  
23 really hard to follow. But the gist of it  
24 is, yes, you first have a date you're  
25 flagged, your earliest flag date. And then

1

2       there is a date in which you are -- your  
3       first date of -- your sixth month of  
4       prescribing a Janssen product. And  
5       whatever flag date that occurs after that  
6       six month of prescribing Janssen, then you  
7       would be...

8             Q.     So let me make sure I understand  
9       this correctly.

10                This small labeler analysis  
11       requires, in order for someone to be  
12       flagged, first requires prescribing a  
13       Janssen product for six months, correct?

14             A.     Correct, for six -- I believe  
15       it's even more stringent. It's six months  
16       within a year.

17                Because I think we partitioned it  
18       by data date, which would give it a year.  
19       But, again, it's definitely six months of  
20       Janssen prescribing. And then after which,  
21       that point in time, then the first date of  
22       flagging.

23             Q.     Okay. So in order for a  
24       prescriber to be flagged, it would have to  
25       be six months of Janssen prescribing and

1

2       then one of these three metrics being  
3       tripped, not just for a Janssen product but  
4       it could be for any opioid product,  
5       correct?

6             A.     Correct. For the three products  
7       that -- so we exclude one because -- and I  
8       believe that's the McKesson 8,000 because  
9       Janssen doesn't have those drugs, and so it  
10      wouldn't really be paying attention to that  
11      line of business.

12             And so our assumption would be,  
13      yes, any of the other three metrics could  
14      have been applied.

15             Q.     But let me just say, does the --  
16      strike that.

17             Does the small prescriber  
18      analysis include flags that Janssen should  
19      have seen for Endo's medications?

20             A.     I'm not going to talk about what  
21      should have been seen.

22             Q.     I'm meaning that like in could it  
23      be tripped.

24             A.     Yes, because the assumption with  
25      IQVIA, just like Allergan has access to

1

2 data on Purdue, is that, yes, Janssen could  
3 see prescriptions being written about other  
4 labelers.

5 Q. So in addition to the assumptions  
6 that we talked about before that Janssen --  
7 that one of the flags was tripped and then  
8 Janssen reported and then immediately the  
9 prescriber stopped prescribing after being  
10 reported to law enforcement authorities,  
11 the other assumption that's baked into here  
12 is that Janssen was monitoring other  
13 manufacturer's medications being  
14 prescribed, correct?

15 MS. CONROY: Objection.

16 A. I wouldn't say that they are  
17 monitoring, but --

18 Q. Under this hypothetical.

19 A. -- that they were looking at the  
20 prescribing history that would have  
21 included those labelers.

22 So it depends on the metric.

23 Some metrics look at -- some of the  
24 metric -- or, I'm sorry. Some of the  
25 metrics, so if it's "common sense" or

1

2       whatnot, they look at all of them together.

3       They're not really labeler by labeler

4       because it's the whole prescribing history

5       that matters.

6               Q.    Do you have any basis in the

7       evidence to say that Janssen was ever

8       monitoring for reporting purposes other

9       labelers' medications?

10              A.    That would be outside of my

11       expertise.

12              Q.    Is that a "no"?

13              A.    Again, it's just outside of my

14       expertise.

15              Q.    Well, my question is a little

16       different.

17                    Do you have any basis in the

18       evidence to say that you know Janssen was

19       ever monitoring for reporting to law

20       enforcement purposes other labeler's

21       medications?

22              A.    So it's not as easy as a "yes" or

23       "no" because you're asking me to review

24       evidence that I wasn't asked to review.  So

25       I can't really make a statement here.

1

2           Q.    So you have not seen any evidence  
3           that Janssen was reviewing for law  
4           enforcement reporting purposes other  
5           labeler's medications, correct?

6           A.    Again, I have not reviewed that.  
7           That was not my expertise.

8           Q.    Do you have any basis to believe  
9           that there is a duty under the Controlled  
10          Substances Act for any manufacturer to  
11          monitor other manufacturer's medications  
12          for purposes of reporting to law  
13          enforcement authorities?

14               MS. CONROY:  Objection.

15          A.    Again, that's outside of my  
16          expertise.

17          Q.    And you've never seen any  
18          evidence of that, right?

19          A.    Again, it's outside of my  
20          expertise, so I wouldn't be looking at that  
21          type of evidence.

22          Q.    But you haven't seen any of that  
23          evidence, correct?

24               MS. CONROY:  Objection.

25          A.    Again, I wouldn't have been

1

2 looking for it.

3

Q. Well, I guess I'm trying to  
4 understand why this opinion exists if you  
5 can't tell me that there is any evidence in  
6 the record that it reflects things that  
7 actually happened.

8

A. I mean, it was a hypothetical  
9 request by -- to me, and so that's what I  
10 enacted. I was asked to enact that.

11

Q. Quickly, you said that your  
12 opinion assumes that the doctor would stop  
13 prescribing immediately upon being reported  
14 to law enforcement, correct?

15

MS. CONROY: Objection.

16

A. I would say the assumption is  
17 that they do not have any more  
18 prescriptions. However that comes to be  
19 is...

20

Q. But do you know how long  
21 investigations into prescribers take?

22

A. Outside of my expertise.

23

Q. Well, if you look at page 40 of  
24 your report, on paragraph 96, it's talking  
25 about a prescriber named Ronald Celeste.



1

2       And there was an "...uptick in  
3       prescriptions caught the attention of the  
4       authorities, who launched a two-year  
5       investigation into his practice in 2014."

6                       So you know here, in your report,  
7       is that the investigation into Mr. Celeste  
8       lasted two years, correct?

9               A.     That was what was reported in the  
10      news.

11              Q.     And that's in your report, right?

12              A.     It is, but it's one  
13      investigation. I can't say what's typical  
14      length of time for an investigation. It's  
15      outside of my expertise.

16              Q.     Yes or no, are you aware of any  
17      instance ever in the real world where a  
18      prescriber stopped prescribing the moment  
19      that an investigation was opened into him  
20      or her?

21                    MS. CONROY: Objection.

22              A.     I'm not really here to talk about  
23      the real world. It's outside of my  
24      expertise, so I can't answer a "yes" or  
25      "no" to that.

1

2 Q. Well, that's not my question.

3 I'm asking you if are aware of any instance  
4 in the real world where a prescriber ever  
5 stopped prescribing the moment an  
6 investigation was opened.

7 A. Again outside of my expertise, so  
8 I can't speak to something that I know or  
9 don't know.

10 Q. You don't know what you don't  
11 know?

12 A. Actually, I don't know what I  
13 don't know?

14 Q. I mean, I'm -- you're avoiding my  
15 question because my question is pretty  
16 simple.

17 It's are you aware of any  
18 instance where a prescriber stopped  
19 prescribing the minute that an  
20 investigation was opened into his or her  
21 prescribing practices?

22 MS. CONROY: Objection.

23 BY MS. LUCAS:

24 Q. Do you know of that, yes or no?

25 A. I just am not going to answer a

1

2 question about something that's not my area  
3 of expertise.

4 Q. Well, refusing to answer  
5 something and not knowing are different  
6 things.

7 Is it then correct that you don't  
8 know of any instance where a prescriber  
9 stopped prescribing the minute that an  
10 investigation was opened into his or her  
11 prescribing practices?

12 A. Look, I haven't looked at that.  
13 It's not part of my expertise. I would not  
14 know because it's not part of my expertise.

15 Q. But you're offering an expert  
16 opinion on this fact that assumes this.  
17 And in order to offer this opinion, you  
18 have to have some factual basis for it.

19 So do you have a factual basis  
20 for this opinion or not?

21 MS. CONROY: Objection.

22 A. So what I'm offering is a  
23 hypothetical scenario using the data that's  
24 been provided to me. I have no expertise  
25 in the real world, due diligence, et

1

2       cetera, that goes beyond that. So there's  
3       a set of assumptions that go into this and  
4       that is all.

5           Q.     So in order for you to get on the  
6       stand and testify about this opinion at  
7       trial, you must identify a factual basis.

8                     Can you do that today?

9                     MS. CONROY: Objection.

10          A.     I really don't know what will go  
11       into that and so I can't answer that.

12          Q.     Is one of the other assumptions  
13       in your small labeler impact analysis that  
14       the patient who would have gotten the  
15       prescription of the flagged doctor does not  
16       go to another doctor and get that same  
17       prescription?

18          A.     I wouldn't say that we talk about  
19       anything about patients in this report.

20          Q.     You didn't consider that?

21          A.     That was not something I would  
22       consider as part of this set of  
23       assumptions. The patients are not  
24       considered in really anywhere in this  
25       report.

1

2           Q.    And you didn't consider also  
3           whether or not whether the medical board  
4           would revoke prescribing privileges  
5           immediately, correct?

6           A.    Again, it was not part of the  
7           assumptions yes or no.  It's just we had  
8           too make the assumption -- to do the  
9           analysis, you make the assumption that the  
10          prescriber stopped prescribing.  The steps  
11          between medical board, due diligence, et  
12          cetera...

13          Q.    Right.  Because it doesn't work  
14          unless you assume that the prescriber  
15          stopped prescribing immediately, correct?

16          A.    I wouldn't characterize it as it  
17          doesn't work.  It's just part of the  
18          exercise.

19          Q.    Well, does it work if the  
20          prescriber didn't stop prescribing  
21          immediately?  Does the result stay the  
22          same?

23          A.    So you could create a period of  
24          which time -- you know, you could say give  
25          them six months after which they were first

1

2       flagged and implement that. It's an  
3       analysis. How I complete the analysis can  
4       work -- you can bake in any amount of time  
5       you'd like, after which time they're first  
6       flagged if that's --

7             Q.    But for this --

8             A.    -- part of this.

9             Q.    Sorry.

10            A.    Yes, but for this, that was not  
11       part assumption.

12                   MS. LUCAS: I will reserve my  
13       rights given the time constraints and  
14       that I have a few more questions or  
15       many more questions. If I were given  
16       the time, we could spend much more time  
17       together, but subject to that  
18       Reservation of Rights, we are done and  
19       I will pass the witness.

20                   Can we go off the record for just  
21       a moment?

22                   THE VIDEOGRAPHER: The time is  
23       3:42 p.m. We are now off the record.

24                   (Recess is taken.)

25                   THE VIDEOGRAPHER: The time is

1

2 3:45 p.m. We are back on the record.

3 EXAMINATION BY

4 MS. DEAN:

5 Q. Ms. Keller, my name is Claire  
6 Dean. I'm with Covington & Burling, and  
7 I'm here on behalf of McKesson.

8 Your time with me will be very  
9 brief.

10 So if we could turn to page 9 of  
11 your report and to paragraph 22. And just  
12 let me know once you're there.

13 (Witness complies.)

14 A. Sorry.

15 Q. No problem.

16 A. Here we are.

17 Q. Okay. So paragraph 22, first  
18 sentence, "This report focuses specifically  
19 and exclusively on manufacturers  
20 anti-diversion and suspicious order  
21 monitoring programs."

22 Did I read that correctly?

23 A. You did.

24 Q. And just to make sure I  
25 understand what that means, to confirm, you

1

2       are not offering any opinions about the  
3       suspicious order monitoring programs of any  
4       wholesale distributors, correct?

5           A.     Correct.

6           Q.     You also did not review or  
7       analyze the suspicious order monitoring  
8       programs of the wholesale distributors,  
9       right?

10          A.     Correct.

11          Q.     And you're not offering any  
12       opinions here today or in the future about  
13       the anti-diversion efforts of any of the  
14       wholesale distributors; is that right?

15          A.     Not to my knowledge.

16          Q.     And you also didn't undertake a  
17       review or an analysis of the anti-diversion  
18       efforts undertaken by any wholesale  
19       distributor; is that right?

20          A.     Correct.

21          Q.     Now you offer no opinions about  
22       whether or how the distributors may have  
23       applied any of the compliance metrics  
24       discussed in your report; is that right?

25          A.     That's correct.



1

2 Q. And you offer no opinions on what  
3 categories of data any of the wholesale  
4 distributors may have had access to between  
5 1997 and 2017; is that right?

6 A. That is correct.

7 Q. You haven't reviewed any  
8 communications between DEA and  
9 distributors, right?

10 A. That is correct.

11 Q. And you offer no opinions about  
12 whether the distributors could have even  
13 applied any of the compliance metrics  
14 outlined in your report; is that correct?

15 A. That is correct.

16 Q. And with respect to opinions on  
17 suspicious order monitoring programs and  
18 the anti-diversion efforts, you also offer  
19 no opinions as to McKesson specifically; is  
20 that correct?

21 A. That is correct.

22 Q. Now I'd like to turn to page 18  
23 of your report, paragraph 57.

24 Now this is where you introduce  
25 the McKesson 8,000 rule.

1

2

Now you cite a single McKesson

3

document here.

4

You are not offering any opinions

5

about how McKesson may have applied its

6

lifestyle drug monitoring program; is that

7

right?

8

A. Correct.

9

Q. You're not offering any opinions

10

about how McKesson's lifestyle drug

11

management program was operated at

12

McKesson?

13

A. That is correct.

14

Q. You're not offering any opinions

15

about whether the lifestyle drug monitoring

16

program complied or did not comply with the

17

Controlled Substances Act; is that correct?

18

A. That's correct. Outside of my

19

expertise.

20

Q. You're not offering any opinions

21

about what due diligence steps may have

22

been taken by McKesson personnel during the

23

lifestyle drug monitoring program, right?

24

A. That is correct. Outside of my

25

expertise.

1

2           Q.    And you didn't undertake any  
3           review or analysis to determine due  
4           diligence steps that may have been taken by  
5           McKesson under the lifestyle drug  
6           monitoring program, right?

7           A.    That is correct.   Outside of my  
8           expertise.

9           Q.    Now last couple of questions from  
10          me and then we will move on to somebody  
11          else.

12                   I'd like to turn to page 79 of  
13          your report, please.

14          A.    Sure.

15          Q.    And actually if you could turn  
16          over to page 80, paragraph 151.

17                   (Witness complies.)

18          Q.    In paragraph 151, you referenced  
19          McKesson.   So I wanted to confirm that you  
20          are not offering any opinions about  
21          McKesson as it relates to the Rite Aid  
22          pharmacy you're discussing in paragraph  
23          151, correct?

24          A.    Correct.   I think all we're doing  
25          is just citing that document there and the

1

2 facts behind it.

3

Q. But you're not offering any  
4 opinions about McKesson's involvement with  
5 that pharmacy or with Dr. Adolf Harper; is  
6 that correct?

7

A. Correct. I would -- that's  
8 outside of my expertise.

9

Q. Okay. And that's outside of the  
10 scope of the opinion in the report and the  
11 opinion you may intend to offer at trial;  
12 is that right?

13

A. I think that's a correct  
14 characterization.

15

Q. Okay. And, sorry, I just want to  
16 make sure I'm clear because I'm not  
17 positive that he was included in this.

18

The same is true for Dr. Adolf  
19 Harper, you're not offering any opinions  
20 about McKesson as it relates to Dr. Adolf  
21 Harper; is that right?

22

A. Correct.

23

Q. Now last questions.

24

Sitting here today, are you aware  
25 of any future opinions you may be offering

1

2           against McKesson?

3           A.    I mean, anything is possible, but  
4           not right this second.

5           Q.    So as it stands today and as  
6           outlined in your report, your opinions are  
7           being offered exclusively against the  
8           labeler defendants and no opinions  
9           currently being offered against  
10          distributors including McKesson; is that  
11          right?

12          A.    Yes.   The report focuses solely  
13          on labelers.

14                MS. DEAN:   Okay.   I don't have  
15                any further questions, and I will pass  
16                my time to someone else.

17                Thank you, Ms. Keller.

18                THE WITNESS:   Thanks, Ms. Dean.

19                THE VIDEOGRAPHER:   The time is  
20                3:52 p.m.   We are now off the record.

21                (Recess is taken.)

22                THE VIDEOGRAPHER:   The time is  
23                3:54 p.m.   We are now on the record.

24

25                EXAMINATION BY

1

2 MR. LAVELLE:

3 Q. Good afternoon, Ms. Keller. My  
4 name is John Lavelle. I'm an attorney at  
5 Morgan Lewis, and I am representing  
6 defendant Rite Aid of Maryland.

7 I'd like to ask you to turn to  
8 your report, page 63.

9 (Witness complies.)

10 A. I'm there. Sorry.

11 Q. Thank you. That's fine.

12 So beginning in paragraph 127 of  
13 your report, you start a discussion of what  
14 you refer to as "suspicious pharmacies"; is  
15 that right?

16 A. Correct, we use that term.

17 Q. Where does that term come from?  
18 What do you mean by "suspicious  
19 pharmacies"?

20 A. So as we stated earlier on the  
21 record today, it's those pharmacies that  
22 triggered our metrics or the metrics that  
23 we employed, I should be more correct to  
24 say.

25 Q. And you discuss in your report

1

2       six different pharmacies that you label as  
3       suspicious pharmacies, right?

4           A.    They were six pharmacies that at  
5       some point triggered one of the compliance  
6       metrics.

7           Q.    How are these six pharmacies  
8       selected?

9           A.    Some were selected because of  
10      their size in the county. Some were  
11      selected because of the number of -- like I  
12      think their prescriptions, so if they were  
13      particularly high dose or not. Others were  
14      because they were known to the court. And  
15      others -- and I believe the Rite Aid, for  
16      example, was because it was mentioned in  
17      conjunction with Adolf Harper.

18          Q.    So I think you referred to three  
19      different reasons there, if I got what you  
20      just testified correctly.

21                You referred to some as being  
22      selected because of their size in the  
23      county, some because they were known to the  
24      court, and then the Rite Aid because it was  
25      mentioned in conjunction with Adolf Harper?

1

2           A.    And then probably a fourth, I  
3           would add, of just unusual prescribing --  
4           or, I'm sorry, we've been talking about  
5           physicians all day. Chargebacks or  
6           purchases. So if it's particularly high  
7           dose or -- I don't really recall exactly  
8           what reason went into each one, but that's  
9           generally how examples come to me.

10          Q.    Who selected them?

11          A.    I did.

12          Q.    Anybody else involved in your  
13           selection process?

14          A.    I think there was... I think the  
15           New Choice Pharmacy was one that was either  
16           known to the court or was requested of me.

17          Q.    When you say "known to the  
18           court," can you tell us what you mean by  
19           that?

20          A.    Yeah. From what I understand or  
21           what I recall is like there's documents  
22           about Adolf Harper or some of the other  
23           physicians in the report. And so with the  
24           pharmacies, I understood there to be  
25           documentation about them as well.



1

2           Q.    So anyone else at Gryphon  
3           involved in the selection of these six  
4           pharmacies other than yourself?

5           A.    My staff.

6           Q.    Anyone in particular assigned  
7           with that task?

8           A.    I would say a group of them  
9           worked on it just to determine, you know,  
10          what would be a short list of good examples  
11          to show in the report.

12          Q.    Were you asked by counsel to  
13          identify any particular pharmacies?

14          A.    As a said earlier, I think New  
15          Choice would have been one.

16          Q.    Were you -- how did you learn  
17          about Dr. Harper?

18          A.    That's a good question.

19          Q.    I thought so.

20                   (Laughter.)

21          A.    I honestly don't know if it was  
22          from reading court documents or being in  
23          the same office as some of the -- and I  
24          don't want to get into privilege here, but  
25          working in the same office as our

1

2       investigative team.

3

4               Q.    Did you look at any other  
5       pharmacies other than the six that you  
6       discussed in this report?

6

7               A.    Definitely.

7

8               Q.    Were there any others that you  
9       are prepared to offer opinions about if  
10      you're called to testify at trial other  
11      than these six pharmacies?

11

12              A.    So to be clear, I don't mean to  
13      offer opinions about these pharmacies, just  
14      how they appear in the data.

14

15              And, two, not at this time.

15

16              Q.    You're not a pharmacist, right?

16

17              A.    That is correct.

17

18              Q.    You have no expertise in  
19      operations of pharmacies, right?

19

20              A.    That is correct.

20

21              Q.    As you sit here today, do you  
22      have any plans to work on developing  
23      opinions about pharmacies in the future?

23

24              A.    Not at this moment, no.

24

25              Q.    All right.  Let's turn to the  
26      section of your report that discusses the

1

2 Rite Aid store, which I believe you  
3 referred to as flag pharmacy 6. That  
4 begins on page 79 of your report.

5 A. I'm there.

6 Q. All right. This is a Rite Aid  
7 store that is located at 1047 Kenmore  
8 Boulevard in Akron, Ohio, right?

9 A. I believe so.

10 Q. Was there any reason other than  
11 the fact that it was associated with  
12 Dr. Harper, in your view, that it was  
13 flagged for discussion in your report?

14 A. I'd have to look at my notes to  
15 be for certain. There might be other  
16 reasons, but I don't -- I can't recall them  
17 right now. But, again, it could have been  
18 because of the number of prescriptions that  
19 it was -- I'm sorry, the number of  
20 shipments that it had at its -- I'm not  
21 saying that correctly. I'm sorry. I've  
22 been talking about prescriptions all day.  
23 The number of chargebacks that it had or  
24 the total number of shipments if we had  
25 looked at, like, the ARCOS data, for

1

2 example.

3

Q. All right. In paragraph 150,  
4 which begins on page 79 and goes on to page  
5 80, can you read the last sentence that  
6 actually appears on page 80? It starts  
7 with the word "Mallinckrodt."

8

A. "Mallinckrodt was the only  
9 defendant labeler to identify the pharmacy  
10 as suspicious, placing them on a 2016  
11 cutoff pharmacy list."

12

Q. What is your basis for saying  
13 that?

14

A. I believe there is a citation  
15 there.

16

Q. All right. You have a citation  
17 and a footnote to a particular document; is  
18 that right?

19

A. That's what I understand that to  
20 be.

21

Q. Do you remember what that  
22 document is?

23

A. It's characterized in the  
24 paragraph as a "cutoff pharmacy list."

25

Q. Do you know whose term "cutoff

1

2       pharmacy" is? Is that a Mallinckrodt term?

3           A.    If we're putting it in quotes, it  
4       would be Mallinckrodt's, but I'd like to  
5       review the document if we want to be  
6       precise.

7           Q.    All right. I think I have the  
8       document and I can show it to you.

9                   Generally speaking, do you recall  
10      what that document was?

11          A.    I'd have to look at it to be  
12      certain.

13                   MR. LAVELLE: All right. Let me  
14      mark this as an exhibit.

15                   (Keller Exhibit 13, Document  
16      produced in native format beginning  
17      with Bates-stamp MNK-T1\_0001315847,  
18      marked for identification, as of this  
19      date.)

20      BY MR. LAVELLE:

21           Q.    Ms. Keller, I've put in front of  
22      you what we marked for Identification as  
23      Exhibit 11.

24                   I'll represent to you this is a  
25      printout from a document that was produced

1

2 in native format. And the original, as I  
3 understand it, is a spreadsheet.

4 A. Okay.

5 Q. I will also tell you that it is a  
6 spreadsheet that has two tabs. And I only  
7 printed out one of the two tabs.

8 A. Okay.

9 Q. And the reason for that, I will  
10 tell you, is the second tab has 160,000  
11 fields on it and it would fill up hundreds  
12 and hundreds of pages.

13 So looking at this tab, do you  
14 recognize this document?

15 A. Yes. I mean, I don't remember it  
16 exactly. I looked at a lot of data sets  
17 through this whole thing, so I can't really  
18 recall exactly which ones look familiar and  
19 which ones don't.

20 Q. Do you know how a decision would  
21 have been made by your team as to which of  
22 the two tabs in a spreadsheet should be  
23 used as the tab on which to run analysis?

24 MS. CONROY: Objection.

25 A. What's on the other tab?

1

2           Q.    All right.  So that's the tab  
3           that is a giant spreadsheet.  And although  
4           I ask the questions here, I will tell you  
5           that there were over 135,000 rows on that  
6           tab.

7                     As you are sitting here,  
8           Ms. Keller, do you believe there was over  
9           135,000 pharmacies on the Mallinckrodt list  
10          of cutoff pharmacies?

11          A.    I wouldn't know.

12          Q.    You wouldn't know?

13          A.    I wouldn't know what they put  
14          on -- let me say that a little bit -- I  
15          wouldn't know exactly how -- to the extent  
16          of how many pharmacies Mallinckrodt would  
17          cut off or were put on a cutoff list.

18          Q.    Do you see the Rite Aid pharmacy  
19          located at 1047 Kenmore Boulevard in Akron,  
20          Ohio, on this list that I've put in front  
21          of you that we marked as Exhibit 11?

22                     MS. CONROY:  13.

23                     MR. LAVELLE:  I'm sorry, 13.  My  
24          apologies.

25                     (Document review.)

1

2           A.    I don't see that pharmacy in  
3           Exhibit 13, but I don't know what's on the  
4           other tab or what the whole entire document  
5           is.

6           Q.    So would you agree with me that  
7           if this particular tab that we marked as  
8           Exhibit 13 is in fact the cutoff pharmacy  
9           list, that that Rite Aid pharmacy is not in  
10          it?

11          A.    I would agree that -- and let me  
12          do one more run-through to be sure.

13          Q.    Sure.

14                   (Document review.)

15          A.    I would say that I do not see  
16          Rite Aid in this Exhibit 13.

17          Q.    Have you ever heard of something  
18          called a chargeback restriction  
19          reinstatement list?

20          A.    No, I have not.

21          Q.    Have you ever seen the email to  
22          which this document that we marked as  
23          Exhibit 13, the spreadsheet, was attached?

24          A.    Not that I can recall sitting  
25          here.



1

2           Q.    All right.  Well, let's mark it  
3           as an exhibit, and I'll show it to you and  
4           you can tell us whether you've seen it  
5           before or not.  Thank you.

6                       (Keller Exhibit 14, Email chain  
7           beginning with email dated 9/23/16 from  
8           K. Harper to McKenzie, Bates-stamped  
9           MNK-T1\_0001315844 through 5846, marked  
10          for identification, as of this date.)

11       BY MR. LAVELLE:

12           Q.    Ms. Keller, we've marked as  
13          Exhibit 14, a document that's Bates-stamped  
14          MNK-T1\_0001315844 through 46.  It's an  
15          email chain.  And I'll just note for the  
16          record that it immediately precedes the  
17          Bates number of the document we were  
18          looking at just a moment ago which was  
19          Exhibit 13.

20                    So my question is:  Have you ever  
21          seen this document, the one we marked as  
22          Exhibit 14, before?

23           A.    This does not look familiar to  
24          me.

25           Q.    All right.  Can we just look at

1

2       the second page of this document? There is  
3       an email there from a Karen Harper of  
4       Mallinckrodt to Patrick Dudley of Cardinal  
5       Health dated Wednesday, March 30, 2016, at  
6       2:06 p.m.

7                     Do you see that?

8             A.    I'm there, yes.

9             Q.    And the second paragraph,  
10       Ms. Harper writes to Mr. Dudley, "For your  
11       convenience, I have attached the current  
12       spreadsheet of pharmacy chargeback  
13       restrictions and reinstatements.  
14       (Reinstatements highlighted in green.)"

15                    Do you remember ever seeing that  
16       before?

17             A.    I do not.

18             Q.    Do you know whether the pharmacy  
19       chargeback restrictions and reinstatements  
20       list is the list that you intended to refer  
21       to as the pharmacy cutoff list in your  
22       report?

23             A.    I really couldn't be sure without  
24       consulting what we had.

25             Q.    What would you need to look at in

1

2 order to be able to answer that question?

3

4 A. I would need to look at the  
5 document as it was produced to us and how  
6 it appeared.

7

8 Q. And do you have notes as well  
9 that you would be able to look at?

10

11 A. I might.

12

13 Q. What kind of notes might you  
14 have?

15

16 A. They might be notes to myself or  
17 notes by my staff.

18

19 Q. Now you make this same statement  
20 about Mallinckrodt being the only defendant  
21 labeler to identify a pharmacy as  
22 suspicious putting them on the cutoff  
23 pharmacy list with respect to each and  
24 every one of these six pharmacies, don't  
25 you?

26

27 A. I'd have to look.

28

29 Q. Well, let's start by looking at  
30 paragraph 128 on page 63 of your report.  
31 That's the section that refers to the  
32 Marc's 23PU pharmacy.

33

34 (Document review.)

1

2 A. Okay.

3 Q. Do you have that in front of you?

4 A. I do. Thank you.

5 (Document review.)

6 A. Yes, I see that. Same citation.

7 Q. And you cite the same document  
8 again, right?

9 A. Yes.

10 Q. The Marc's 23PU pharmacy isn't in  
11 that spreadsheet either, is it?

12 A. It's not in an exhibit -- I have  
13 to look, but it's not in Exhibit 13.

14 Q. Right.

15 A. Again, there is a second tab, and  
16 I'd have to look at the entire document to  
17 be certain.

18 Q. Turn to paragraph 120 -- I'm  
19 sorry, page -- the CVS section here.  
20 Paragraph 133 on page 67.

21 A. Okay.

22 Q. Again you have that same  
23 sentence, do you not, "Mallinckrodt was the  
24 only defendant labeler to identify the  
25 pharmacy as suspicious, placing them on a

1

2           2016 cutoff pharmacy list," right?

3           A.    Again, the same citation.

4           Q.    And the same citation and the  
5           same document?

6           A.    Correct.

7           Q.    All right. We can go through  
8           this process for each of them, but suffice  
9           it to say that none of these six pharmacies  
10          appear on what we marked as Exhibit 13.

11                    So does that suggest to you that  
12          you relied on the second tab of whatever  
13          that document is?

14          A.    If Exhibit 13 is the first tab  
15          and the pharmacies are in the second tab,  
16          then logic would be yes.

17          Q.    All right. And if it turned out  
18          that tab 2 was not the cutoff pharmacy list  
19          but in fact was a listing of every pharmacy  
20          in the United States, that would have been  
21          a mistake, right?

22          A.    I'd have the review that to be  
23          sure.

24          Q.    You don't have a view as we sit  
25          here today as whether or not a tab that had

1

2 over 135,000 rows in a spreadsheet could  
3 possibly be a cutoff pharmacy list?

4 MS. CONROY: Objection.

5 A. Again, I'm not here to talk about  
6 what actually was suspicious or not  
7 suspicious from the labelers' perspective.  
8 So that's outside of my expertise. I  
9 wouldn't have known what would have been a  
10 reasonable amount.

11 Q. All right. Coming back to the  
12 discussion of that Rite Aid pharmacy on  
13 page 80, paragraph 151, and I think you  
14 said this earlier, that you viewed this as  
15 connected to Dr. Harper, this Rite Aid,  
16 correct?

17 A. Yes, I believe there was some  
18 documents there that discussed that  
19 Rite Aid in connection with Dr. Harper.

20 Q. Yes.

21 Do you remember what those  
22 documents were? You cite two documents in  
23 your footnote there at the bottom of page  
24 80.

25 A. I don't recall them off the top

1

2 of my head.

3

Q. Do you have any recollection of  
4 what they were at all? Were they emails?  
5 Were they spreadsheets? What were they?

6

A. I'd have to look to be certain.

7

Q. All right. You don't have any  
8 recollection at all even if --

9

A. I'm sorry, there's like hundreds  
10 of cites and hundreds of thousands of rows  
11 of data.

12

Q. All right. Well, let me mark  
13 that as the next exhibit, next two  
14 exhibits, and we can look at them together?

15

(Keller Exhibit 15, Email chain  
16 beginning with email dated 10/31/11  
17 from Oriente to Nichols, Bates-stamped  
18 MCKMMDL006332908 through 2910, marked  
19 for identification, as of this date.)

20

BY MR. LAVELLE:

21

Q. And so Ms. Keller, we marked as  
22 Exhibit 15 the document that's  
23 Bates-stamped MCKMDL00632908 through 10,  
24 which I think is the first document you  
25 reference in this footnote; is that right?

1

2 A. That looks correct.

3 Q. Do you recognize this document?

4 A. Yes.

5 Q. How did you find this document?

6 A. I don't recall.

7 Q. Did someone give it to you?

8 A. I don't recall. I really don't.

9 Q. Did you do searches for records  
10 through documents in the process of  
11 preparing your report?

12 A. We did.

13 Q. You say in this report that this

14

█

█

█

18 Do you remember saying that in  
19 your report?

20 A. I'm looking at that statement  
21 here.

22 Q. Right.

23 Who denied that request?

█

█



1

2

3

4

5

Q. All right. Well, let's take a  
look at this document that we have in front  
of you.

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■

1

█ [REDACTED]

3

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

█ [REDACTED]

2



5

5



1

2

Q. Okay. That's okay. I have it

3

here. I will show it to you now.

4

(Keller Exhibit 16, Email chain

5

beginning with email dated 10/31/11

6

from Lai to Oriente and others,

7

Bates-stamped MCKMDL00626683 through

8

6685, marked for identification, as of

9

this date.)

10

BY MR. LAVELLE:

11

Q. Ms. Keller, we marked as

12

Exhibit 16, a document Bates-stamped

13

MCKMDL00626683 through 5.

14

A. Okay.

15

Q. Would you agree with me that's

16

the second document that's referenced in

17

that footnote of yours?

18

A. That is what we cite, yes.

19

Q. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2



5



1

■

■

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Okay. You reference also the deposition of Sophia Lai Novack in that same footnote, right?

A. I do.

Q. Did you read that?

A. You'd have to refresh my memory. I read or skimmed a lot of depositions.

Q. Do you remember as you sit here today whether Ms. Novack was actually shown a copy of either of those documents?

A. That, I don't know.

Q. How did you pick Ms. Novak's deposition to cite here?

A. I don't recall specifically, but I -- it might have been suggested to me.

Q. By whom?

A. An attorney.

Q. Ms. Singer, perhaps?

A. That, I don't recall.

Q. If it wasn't Ms. Singer, who else could it have been?

A. I don't remember all the

1

2 attorneys. I worked with several, so I  
3 don't recall the names, but I could look.

4 Q. Were you given access to a  
5 database of depositions?

6 A. If they were in Relativity, then  
7 yes.

8 Q. Do you remember as you sit here  
9 whether you were given access to  
10 depositions as part of that Relativity  
11 database or not?

12 A. I definitely know I searched for  
13 some of the depositions somewhere that were  
14 in here.

15 Q. With respect to Dr. Harper, you  
16 described that he surrendered his license  
17 in May of 2012, right? I think you say  
18 that in paragraph 104 of this report on  
19 page 46.

20 A. Sorry, say again. What  
21 paragraph?

22 Q. Paragraph 104, which is on page  
23 46.

24 A. Thank you.

25 (Document review.)

1

2           A.     Correct.

3           Q.     And you also say that he pled  
4     guilty to drug-trafficking charges in 2014.  
5     You say that in paragraph 105.

6           A.     That appears to be so.

7           Q.     Where did you get that  
8     information?

9           A.     That must be from the press  
10    release that we read online.

11          Q.     Are you aware that the  
12    deposition's been taken in this place of  
13    the detective who was the lead investigator  
14    on Dr. Harper's investigation?

15          A.     Am I aware that there have been  
16    depositions taken? No.

17          Q.     Have you ever heard of the name  
18    Detective Patrick Leonard?

19          A.     No.

20          Q.     Are you aware that he was the  
21    lead detective on the Harper investigation?

22          A.     No.

23          Q.     Are you aware that his deposition  
24    was taken in this case?

25          A.     No.



1

2

Q. Are you aware that he testified

3

that he was given a tip by a pharmacist

4

working at the Rite Aid pharmacy on Kenmore

5

Avenue in Akron over a year before

6

Dr. Harper had to surrender his license?

7

Were you aware of that?

8

A. As I said, I didn't read the

9

deposition, so I wouldn't be aware of

10

anything that was in it.

11

Q. Were you aware that tips were

12

provided to law enforcement officials by

13

other pharmacies in addition to that

14

Rite Aid pharmacy that you flagged in this

15

report?

16

A. No, that would be outside of my

17

expertise. And, again, I didn't read his

18

deposition, so I wouldn't know.

19

Q. So no one told you, for example,

20

that CVS also flagged Dr. Harper over a

21

year before his license was revoked?

22

A. I was not told that, no.

23

Q. Did anyone tell you that

24

Walgreens also flagged Dr. Harper and

25

complained about him to law enforcement

1

2 over a year before his license was revoked?

3 A. No, again outside of what I would

4 have been told or looked at in this report.

5 Q. Did anyone tell you that Giant

6 Eagle, a supermarket chain which operates

7 pharmacies, also complained about

8 Dr. Harper to local law enforcement

9 officials over a year before his license

10 was revoked?

11 A. No, as it was outside of the

12 scope of this report.

13 Q. And I suppose no one told you

14 that another local pharmacy, Ritzman

15 Pharmacy, also complained about Dr. Harper

16 to local law enforcement officials over a

17 year before his license was revoked?

18 A. Same answer. Again, it would be

19 outside of the scope, so I was not told

20 that, no.

21 Q. So when you say in your report

22 that this Rite Aid pharmacy was associated

23 with Dr. Harper, you're not referring to

24 the fact that this Rite Aid pharmacy

25 provided a tip to local law enforcement

1

2 officials that were actually important in  
3 starting the investigation against him; is  
4 that right?

5 MS. CONROY: Objection.

6 A. So when I say this Rite Aid was  
7 associated, you know, it's the documents  
8 that we cite there. Again, as far as what  
9 was actually done by labelers or pharmacies  
10 in the course of actual due diligence or on  
11 the ground, as we were saying earlier in  
12 the day, enforcement actions, that would be  
13 outside of the scope of my expertise or  
14 report.

15 Q. It's outside of your expertise.  
16 It's also outside of your knowledge, right?

17 A. I think that would be correct to  
18 say, that I... I think that would be  
19 correct to say.

20 Q. Thank you, Ms. Keller. That is  
21 all I have.

22 A. Thank you.

23 THE VIDEOGRAPHER: The time is

24 4:27 p.m. We are off the record.

25 (Recess is taken.)

1

2

THE VIDEOGRAPHER: The time is

3

4:42 p.m. We are back on the record.

4

EXAMINATION BY

5

MS. O'GORMAN:

6

Q. Good afternoon, Ms. Keller. My

7

name is Debra O'Gorman. I represent Purdue

8

defendants, and I have just a few questions

9

for you this afternoon.

10

If you could take a look at

11

Exhibit 5, your expert report, page 89.

12

And I'll refer you to the references to 867

13

data.

14

A. I'm there.

15

Q. And you said you had 867 data

16

only for Purdue; is that correct?

17

A. Correct.

18

Q. And what is 867 data?

19

A. I think we addressed this earlier

20

today, and it's my intention to state the

21

same answer. But I understand it to be

22

data that labelers have that tracks the,

23

their products.

24

Q. Do you recall the time period

25

covered by Purdue's 867 data?

1

2           A.    Yes.   I would have that here.

3

4                   On page 59, table 34, after  
5           processing, that would be from 2009 to  
6           2018. That was the data that was provided  
7           to me.

8

9           Q.    And you mentioned in your report  
10           that you had 3,572 files of 867 data.

11

12                   Do you recall that?

13

14           A.    Yes.   I'd have to go back to the  
15           methodology, but I believe it was produced  
16           in more than 3,000 files.

17

18           Q.    And what did you do, if anything,  
19           to combine those files?

20

21           A.    Sure.

22

23                   So you can see on page 90,  
24           paragraph Z, we had 3,572 files of five  
25           different schemas. So they were all  
without column headers, from what I  
understand, but I could be wrong in stating  
that because it doesn't -- I'm sorry, one  
of them did not have a schema, but they had  
different schema lengths, and so those were  
then appended to one another based off of  
the columns in common.

1

2           Q.    So you combined those files and  
3   then used that to run your analysis?

4           A.    That's correct.

5           Q.    Okay.  If I can refer you to page  
6   20 of your expert report, you reference  
7   there certain Purdue algorithms.

8           A.    Correct.

9           Q.    And what is algorithm?

10          A.    It can mean anything to anybody,  
11   to be honest.  The term has been somewhat  
12   polluted recently to mean anything.  A lot  
13   of companies like to say they have this  
14   fancy algorithm to predict X, Y and Z, but  
15   as far as this, we interpreted an algorithm  
16   to mean an operating procedure or something  
17   that was documented as to be done by the  
18   labeler.

19          Q.    And what, if anything, did you do  
20   to try to replicate Purdue's algorithms for  
21   your report?

22          A.    Those would be in the addendum.

23          Q.    So for your initial report, you  
24   didn't do anything to replicate Purdue's  
25   algorithms?

1

2           A.     Correct. I think the one that we  
3     mention here, there was not enough  
4     information to be able to implement it  
5     accurately, but we do in the addendum.

6           Q.     Okay. And in the addendum, you  
7     add five metrics that you obtained from  
8     Purdue documents; is that correct?

9           A.     Without counting them, but, yes,  
10    we implement a number of --

11          Q.     And those are on pages 26 and 30  
12    of your supplemental report, correct?

13          A.     Yes. I see one, two that were  
14    manufactured to prescriber. And then one,  
15    two, three that were manufactured to  
16    pharmacy metrics.

17          Q.     Do you recall if these metrics  
18    were identified by you or somebody on your  
19    team?

20          A.     They were identified by me or  
21    somebody on my team.

22          Q.     And do you know how they were  
23    identified?

24          A.     I believe one I found out after  
25    filing the report because I was reading a

1

2 different deposition that -- or document  
3 that referenced a set of the metrics.

4 And then in looking for a  
5 definition of chargeback, we found the  
6 other metrics.

7 Q. Okay.

8 MS. O'GORMAN: Can you mark this  
9 as the next exhibit.

10 (Keller Exhibit 17, Purdue Pharma  
11 L.P. document Bates-stamped  
12 PDD1503450011 through 0024, marked for  
13 identification, as of this date.)

14 BY MS. O'GORMAN:

15 Q. We marked as Exhibit 17 a  
16 document Bates-stamped PDD1503450011.

17 Is this one of the documents that  
18 you used to identify Purdue metrics?

19 A. Let me be for certain.

20 Q. I believe it's referenced on page  
21 26 of your expert report in one of the  
22 footnotes, although you use the Bates  
23 number ending in 12, which is the second  
24 page of the document.

25 A. Yes.



1

2           Q.    Was this document available to  
3           you at the time you prepared your initial  
4           report?

5           A.    If it was cited in the report,  
6           then it was.  But as I said earlier in my  
7           testimony, that I believe we received the  
8           document a little bit too soon to filing to  
9           be able to implement these metrics.

10          Q.    And it looks like numbers 2 and 4  
11          on page that ends in 12 of this report were  
12          implemented by you in your addendum as  
13          Purdue metrics; is that right?

14          A.    Correct.

15          Q.    And you did not apply the other  
16          criteria identified in this document,  
17          correct?

18                   MS. CONROY:  Objection.

19          A.    So, for example, the cash  
20          prescriptions, I don't --

21                   (Interruption.)

22                   THE VIDEOGRAPHER:  The time is  
23                   4:48 p.m.  We are now off the record.

24                   (Recess is taken.)

25                   THE VIDEOGRAPHER:  The time is

1

2 4:50 p.m. We are back on the record.

3 BY MS. O'GORMAN:

4 Q. So before we had an unintended  
5 break, you were telling me about or I asked  
6 you about the application of other criteria  
7 in this Purdue document.

8 A. Yes.

9 So as far as implementing other  
10 or speaking about other SOMS programs, no,  
11 that would be outside of expertise.

12 But as you can see on the  
13 document, there could be considered a  
14 metric on point 3 where it talks about cash  
15 prescriptions as an example.

16 I was not provided with data  
17 about the number of cash prescriptions as  
18 part of total prescriptions. I didn't have  
19 that type of data. And I think I even note  
20 that in my limitations.

21 Q. Okay. And you see that the  
22 numbers 3, 4, 5, and 6 on this document are  
23 various steps that would be taken.

24 Do you see those there?

25 A. Sure. I see those steps. Sorry.

1

2 I didn't mean to be flippant.

3

Q. And do you know whether any  
4 action was taken in conforming with those  
5 steps in connection with any orders that  
6 you flagged under this metric?

7

A. That would be outside of the, my  
8 expertise.

9

(Keller Exhibit 18, Document  
10 produced natively, Bates-stamped  
11 PPLP004449246, marked for  
12 identification, as of this date.)

13 BY MS. O'GORMAN:

14

Q. We marked as Exhibit 18 a  
15 document numbered PPLP004449246.

16

Do you recognize this document as  
17 one from which you obtained Purdue metrics?

18

A. I do. I found it.

19

Q. And on the fifth page of that  
20 document, there is a list of additional  
21 metrics to identify pharmacies for review.

22

Do you see that there on the  
23 bottom page?

24

A. Yes.

25

Q. And is this where you obtained

1

2 the Purdue metrics that you've included in  
3 your supplemental addendum?

4 A. Yes. I think the ones that we  
5 implement are from that 2010 to 2012 period  
6 because those are the ones that we felt  
7 that we could, we had enough information  
8 to -- hang on to make sure.

9 (Document review.)

10 Q. I believe it's in the 2012 to  
11 2015 -- ^ ck speaker

12 A. That's --

13 Q. -- time period?

14 A. I misspoke when I said 2010 to  
15 2012. Her correction of 2012 to 2015.

16 Q. And how did you come to select  
17 these metrics?

18 A. So as we went through, if there  
19 was something that we felt that could  
20 create a flag or a metric, then we could.  
21 And so these specifically say metric No. 1,  
22 metric No. 2 and metric No. 3, so that is  
23 why we chose those.

24 Q. And these are listed here as  
25 additional metrics.

1

2 Do you see that in the title?

3 A. Yes.

4 Q. Does that suggest to you that  
5 these are in addition to other metrics that  
6 were being applied?

7 A. I don't really know what else --  
8 I don't really understand or really weighed  
9 the considerations of the other documents.  
10 I just saw some metrics that I attempted to  
11 implement here.

12 Q. And do you see that these metrics  
13 require or contemplate that there will be a  
14 review when metrics might be triggered, the  
15 last two bullet points under that same  
16 section?

17 A. I do see those statements on this  
18 document.

19 Q. And you have no knowledge of any  
20 review that would have been done by Purdue  
21 in connection with any orders that might  
22 have been flagged under your application of  
23 the metrics; is that correct?

24 A. Correct. I would not speak to  
25 the actual on-the-ground due diligence or

1

2       what was done in real life.

3               Q.    And am I also correct that you're  
4       not suggesting that the DEA required any of  
5       these metrics that you've identified?

6               MS. CONROY:  Objection.

7               A.    Correct.  That would be outside  
8       of my expertise.

9               Q.    And you're not offering an  
10       opinion on the real-world results or the  
11       application of any of these metrics; is  
12       that correct?

13              A.    That would be correct.

14              Q.    Now we've talked earlier at your  
15       deposition about the IQVIA data set that  
16       you utilized for your review.

17                    Do you recall that testimony?

18              A.    Yes, I remember speaking about  
19       IQVIA.

20              Q.    And that was the Allergan data  
21       set that you reviewed, correct?

22              A.    Correct.

23              Q.    Do you have any familiarity with  
24       what information Purdue received from IQVIA  
25       or IMS at any point in time?

1

2           A.    I did review some documents.

3           Q.    And what do you recall about  
4 those documents?

5           A.    So I have, in my other reliance  
6 materials that I brought with me this  
7 morning, documents that cite Purdue's  
8 purchases of IQVIA data from several years  
9 over the past, at least into the '90s. I  
10 don't remember at what point those start.

11          Q.    Do you know what data  
12 specifically Purdue purchased from IQVIA  
13 for particular years?

14          A.    Xponent.

15          Q.    Do you know whether Purdue  
16 received information related to all opioids  
17 or only its own products at any given point  
18 in time?

19          A.    I'd have to consult the document  
20 to be certain.

21          Q.    Do you have any expertise in  
22 pharmaceutical marketing?

23          A.    I do not.

24          Q.    Have you ever worked for a  
25 pharmaceutical company?

1

2           A.    I have not.

3           Q.    Have you ever been present for a  
4   sales call by a pharmaceutical  
5   representative?

6           A.    No.

7           Q.    Do you have any expertise in the  
8   purpose for which sales calls are made?

9           A.    I do not.

10          Q.    Is it correct, then, that you  
11   have no familiarity with the educational  
12   component of sales calls by pharmaceutical  
13   representatives?

14          A.    That would be outside of my  
15   expertise.

16          Q.    Have you ever reviewed call notes  
17   for a pharmaceutical company?

18          A.    I have.

19                MS. CONROY:  In any --

20                THE WITNESS:  Oh, sorry.

21                MS. CONROY:  In any litigation?

22                MS. O'GORMAN:  Ever.

23                MS. CONROY:  Yeah, okay.

24   BY MS. O'GORMAN:

25          Q.    In what situation have you



1

2 reviewed call notes?

3

A. So I think we cite to a few call  
4 notes in this document.

5

Q. And do you consider yourself to  
6 have any expertise in the interpretation of  
7 call notes?

8

A. No.

9

Q. Have you reviewed any of the  
10 other expert -- any of the defense expert  
11 reports that have been submitted in this  
12 matter?

13

A. Yes.

14

Q. Do you know which ones you  
15 reviewed?

16

A. Bell, Buthusiem, I might be  
17 saying it wrong, to be honest with you. We  
18 already talked about that.

19

Q. Any others?

20

A. That is all.

21

Q. Do you recall reading a report by  
22 Iain Cockburn?

23

A. No.

24

Q. If you can take a look at your  
25 initial expert report, page 16, tables 1

1

2           and 2.

3           A.     Sure.   I am there.

4           Q.     And what was Purdue's market  
5           share in the relevant counties by  
6           prescription as listed in tables 1 and 2?

7           A.     3.3 in table 1 in terms of total  
8           county percentage and 3.7 -- for Summit  
9           County, I should say.   And 3.7 for  
10          prescriptions in Cuyahoga County.

11          Q.     Is that information that you  
12          calculated?

13          A.     That would be through a SQL  
14          script, yes.

15                 MS. O'GORMAN:   I have no further  
16          questions.   Thank you.

17                 THE VIDEOGRAPHER:   The time is  
18          4:59 p.m.   We are now off the record.

19                 (Recess is taken.)

20                 THE VIDEOGRAPHER:   The time is  
21          5:00 p.m.   We are now back on the  
22          record.

23          FURTHER EXAMINATION BY

24          MS. LEVY:

25          Q.     Ms. Keller, I am Jenny Levy

1

2       again. I have what I think should be a  
3       really quick follow-up question based on  
4       your responses to the questioning by the  
5       last three lawyers who have been  
6       questioning you.

7                   A couple times in your answer you  
8       keep referring to the Allergan data.

9                   Do you remember the answers that  
10      I'm referring to?

11                  A. Yes, I think so.

12                  Q. And when you refer to the  
13      Allergan data, you're referring to the body  
14      of data from IQVIA XPONENT database,  
15      correct?

16                  A. That's correct. It's actually  
17      cited in this exhibit that you just handed  
18      me, I believe.

19                  Q. A couple of your answers make it  
20      seem to me as if you are under the  
21      impression that Allergan, the business, has  
22      always had that data.

23                   Is that the impression that  
24      you're under?

25                  A. That, I wouldn't know for

1

2       certain, but they did produce data for the  
3       entire time period '97 and 2017.

4                   (Keller Exhibit 19, Letter on  
5       Kirkland & Ellis letterhead dated  
6       8/31/18 from Welch to Donna Welch to  
7       the Plaintiffs' Executive Committee,  
8       not Bates-stamped, marked for  
9       identification, as of this date.)

10      BY MS. LEVY:

11           Q.    Okay. I'm going to show you what  
12       has been marked as Exhibit 19. We just put  
13       that in front of you.

14           A.    Thank you.

15           Q.    I assume that you have not seen  
16       this document before right now.

17                   Am I right about that?

18           A.    That is correct.

19           Q.    Okay. This is a document from --  
20       on Kirkland & Ellis letterhead. That is --  
21       I'll represent to you that is the law firm  
22       we're in right now. It's my law firm. And  
23       this is a letter from my partner Donna  
24       Welch to the Plaintiffs' Executive  
25       Committee.

1

2 Do you see that?

3 A. I do see that.

4 Q. And do you know what the  
5 Plaintiff's Executive Committee is?

6 A. I do not know what that is.

7 Q. Okay. And you look at the second  
8 page of Exhibit 19 on the back, when you  
9 see the list of the cc's on this  
10 document --

11 (Document review.)

12 Q. -- and you see in that list of  
13 cc's you see among other lawyers, Linda  
14 Singer's name, second to the last?

15 A. I do.

16 Q. Do you recognize any of the other  
17 lawyers on that cc list?

18 A. Tom Egler.

19 Q. Is he one of the lawyers that you  
20 interacted with in preparation with your  
21 opinions in this case?

22 A. Not particularly, no.

23 Q. How do you recognize that name  
24 then?

25 A. He was the one that I remembered

1

2       knowing to ask -- or his name came up, I  
3       guess is more correct to say, in getting  
4       the IQVIA data.

5             Q.    So if you turn back over to the  
6       front page of Exhibit 19, in the second  
7       bolded section that's labeled "IQVIA Data,"  
8       are you with me?

9             A.    I'm there.

10            Q.    In that paragraph it says, "On  
11       August 10th, 2018, Allergan Finance  
12       produced data from IQVIA's XPONENT and  
13       XPONENT PLANTRAK products related to  
14       prescriptions of opioids from 1997 to the  
15       present."

16                   And there is a cite there that  
17       says, "See Allergan MDL02485011."

18                   Do you see that?

19            A.    I do.

20            Q.    If you turn in your report to  
21       page 28 and you look at footnote 81, that's  
22       the same data set that you cite in your  
23       report as the Allergan data, correct?

24            A.    Give me one second.  Sorry.

25                   (Document review.)

1

2           A.     That is correct.

3           Q.     Okay. And then this letter goes  
4 on to say, "As stated in the statement of  
5 work we are producing today, this data was  
6 purchased by Allergan for the first time on  
7 May 15th, 2018. Allergan Finance and its  
8 predecessor companies did not have this  
9 data prior to the purchase."

10                   Do you see that?

11           A.     I do.

12           Q.     Did any of the lawyers that you  
13 worked with in this case tell you that  
14 Allergan did not in fact have this data  
15 prior to the purchase?

16           A.     It was not made aware to me that  
17 they had purchased the data for this, as  
18 it's stated here.

19           Q.     And my question is slightly  
20 different.

21                   Did any of the lawyers in this  
22 case tell you that Allergan did not have it  
23 prior to the purchase?

24           A.     No, that was not told to me that  
25 Allergan did not have access to the data

1

2 prior to the purchase.

3

MS. LEVY: I'm going to pass you  
4 along to someone else. Thank you.

5

THE WITNESS: Thank you.

6

THE VIDEOGRAPHER: The time is  
7 5:05 p.m. We are going off the record.

8

(Recess is taken.)

9

THE VIDEOGRAPHER: The time is  
10 5:07 p.m. We are on the record.

11 EXAMINATION BY

12 MR. HAMMOUD:

13 Q. Good afternoon, Ms. Keller. My  
14 name is Adam Hammoud. I'm an attorney from  
15 Morgan Lewis, and I represent Teva  
16 Pharmaceuticals USA Inc., Cephalon, Inc.  
17 and Actavis, LLC, which I will collectively  
18 refer to as the Teva defendants, if that's  
19 all right.

20 A. Great to meet you.

21 Q. Good to meet you.

22 Could you explain what national  
23 drug codes are?

24 A. Sure.

25 A National Drug Code is an NDC.



1

2 I think somewhere in one of my reliance  
3 materials, it breaks down what the  
4 components of an NDC are, the first few  
5 being an identifier for the labeler and the  
6 rest about the package.

7 Q. Okay. And you talked about this  
8 a little bit earlier, but can you explain  
9 the process that you followed for assigning  
10 national drug codes to specific labelers?

11 A. Sure.

12 So the first few digits, I can't  
13 remember if it's four or five, I would have  
14 to look at the breakdown of it, is for the  
15 labeler itself.

16 And I don't recall for this  
17 particular litigation -- or for this  
18 particular assignment needing to assign  
19 labelers to NDC codes, because they either  
20 came to me through the ARCOS data or they  
21 were through the IQVIA processing file.

22 Q. And so your testimony is you  
23 either retrieved the national drug codes  
24 and assigned them to labelers based on what  
25 was available to you in the ARCOS data or

1

2 the IQVIA data; is that correct?

3 A. Sorry. Let me state that more  
4 clearly.

5 The ARCOS data as it came to me  
6 for this report was processed by McCann.  
7 And McCann, I believe, already had taken  
8 those steps. So to the extent that he had  
9 done that, that was done.

10 Q. And so you're relying on some of  
11 the work that McCann performed on the ARCOS  
12 data, correct?

13 A. That would be correct.

14 Q. Okay. And how did you account  
15 for any changes in the NDC or the National  
16 Drug Code ownership by the labelers that  
17 resulted from, for example, acquisitions  
18 among the labelers?

19 A. Sure. I think we discussed this  
20 a little bit earlier.

21 So, for example, the ARCOS file,  
22 I think the -- and I'm guessing at how  
23 McCann processed it, so you would have to  
24 take his testimony and his methodology as  
25 how he actually did it. But if I were him,

1

2       what you would do is take the NDC labeler  
3       file from the FDA and then match it based  
4       off of the first four. And so that data  
5       set is available at a snapshot in time.

6                   And then for the IQVIA data, that  
7       came with a processing file, so it has  
8       nothing to do with NDCs, but the IQVIA  
9       unique identifier for each drug and then  
10      match those across.

11           Q.    Okay. And if you turn to page 85  
12      of your report.

13                   (Witness complies.)

14           Q.    You can turn to page 87. And  
15      look at table 77 for me.

16                   In table 77, you identify Actavis  
17      Pharma, Inc., Allergan, Inc., Cephalon,  
18      Inc. and Watson Pharma, Inc. as part of the  
19      labeler named group under Teva; is that  
20      correct?

21           A.    Are we looking at table 77?

22           Q.    Yes.

23           A.    So I see Allergan, Teva, and Teva  
24      and another Teva.

25           Q.    So you see Allergan, Teva CNS,

1

2       Teva Parenteral and Med and Teva

3       Pharmaceuticals assigned to Teva, correct?

4             A.    I do see that.

5             Q.    And then if you turn back to page

6       85 briefly, here is where you see Teva as

7       the labeler named group for Teva

8       Pharmaceuticals USA, Actavis Pharma, Inc.,

9       Allergan, Inc., Cephalon, Inc. and Watson

10      Pharma, Inc.; is that correct?

11            A.    That is correct.

12            Q.    Does that mean that all the NDCs,

13      the national drug codes assigned to Teva

14      Pharmaceuticals USA, Inc., Actavis Pharma,

15      Inc., Allergan, Inc., Cephalon, Inc.,

16      Watson Pharma, Inc. in that table and in

17      your analysis were included in the

18      transactions that were flagged for Teva's

19      products?

20            A.    Correct. All of the products

21      underneath each one of these, so Teva,

22      Actavis, Allergan, Cephalon, and Watson

23      were all grouped under Teva.

24            Q.    And was that for all points in

25      time?

1

2           A.     Yes.

3

4           Q.     All right. And if you turn  
5 briefly to page 28, footnote 79, here in  
6 this footnote, it says, "Teva acquired the  
7 Actavis/Watson generic pharmaceutical  
8 business from Allergan in 2016, and those  
9 entities are currently operating under the  
10 Teva SOMS system. Prior to 2016, the  
11 Actavis/Watson operated under Allergan's  
12 SOMS system."

12                     Did I read that correctly?

13           A.     You did.

14           Q.     And is that your testimony today,  
15 do you believe that to be truthful that,  
16 excuse me, that Teva acquired the Actavis  
17 and Watson generic pharmaceutical business  
18 from Allergan in 2016?

19           A.     As it states in my report, yes.

20           Q.     What I'm trying to understand is  
21 where you got the -- what support you have  
22 that Teva acquired Allergan, Inc.

23           A.     What support I have that Teva  
24 acquired Allergan?

25                     I think as we were stating

1

2 earlier, that there is a document, and I  
3 would be happy to provide it if it's not  
4 part of our reliance materials.

5 Q. Okay. But you're not sure one  
6 way or the other if Teva, in fact, acquired  
7 Allergan, right?

8 A. I'm not an expert in corporate  
9 acquisition, no.

10 Q. No worries.

11 Back to national drug codes.

12 Did you distinguish any of the  
13 national drug codes for generic  
14 opioid-containing products various national  
15 drug codes for branded opioid-containing  
16 products? Did you make any -- did you  
17 distinguish between generic and branded  
18 products in any way?

19 A. Not for this, no.

20 Q. Okay. And were the national drug  
21 codes pulled from the IQVIA data that you  
22 received, I guess, that was produced by  
23 Allergan but that you received through  
24 plaintiff's counsel?

25 A. So just to clarify. ARCOS have

1

2 NDCs. Chargebacks generally have NDCs.

3 But the IQVIA data does not contain a NDC.

4 It has its own unique identifier, and it's  
5 impossible to know what that NDC --

6 Q. Okay.

7 A. -- what corresponding NDC is  
8 there. They have their own little number.

9 Q. Understood.

10 So you obtained that NDC from  
11 chargebacks in ARCOS data; is that correct?

12 A. Yes, there were NDCs and  
13 chargebacks in ARCOS.

14 Q. Did you remove any national drug  
15 codes during your analysis?

16 A. Sure.

17 Q. And I guess you can -- if you  
18 need to refer to it, in page 94 of your  
19 report, paragraph 170, you start to talk  
20 about that a little bit.

21 Do you recall the process you  
22 followed for removing those national drug  
23 codes?

24 A. So there's a few things I think  
25 that are being conflated here.

1

2

So this section here is talking

3

about chargebacks, and it's cleaning

4

steps that were taken -- so paragraph 170

5

is talking about the steps to process the

6

chargeback data. If you want to ask me

7

about the NDC codes and specifically which

8

ones weren't included or included in the

9

analysis, I think I talk about that earlier

10

in a different paragraph of the report.

11

Q. Okay. Even with respect to the

12

chargeback data, you said there were

13

invalid NDCs. That NDC values were

14

identified that could not be validated by

15

DEA, FDA or CMBS data sources; is that

16

correct?

17

A. That is correct. I looked to see

18

if I could match -- so when we received the

19

data, some of the NDCs were just either cut

20

off, incomplete, mispadded. So NDCs need

21

to be padded to a 9, 10 or 11-digit format

22

following a certain formatting structure.

23

And if any one of those combinations of

24

formatting didn't match what would have

25

been a valid NDC in any of the files that I



1

2       searched, and I tried very hard to try to  
3       find a match for these files because I  
4       didn't want to exclude data, then they  
5       would have been excluded.

6               So, you know, an example, and I  
7       remember seeing it, would be an NDC code of  
8       just straight zeroes. Zero, zero, zero,  
9       zero, zero. That would not have been  
10      included.

11             Q.    Okay. Thank you.

12               Turning now to suspicious order  
13      monitoring analytics and programs, are you  
14      familiar with Cephalon, Inc.?

15             A.    To the extent that its name  
16      appears in the data, but not much beyond  
17      that.

18             Q.    Did you review any documents  
19      regarding Cephalon's suspicious order  
20      monitoring program?

21             A.    I don't believe that we have a  
22      Cephalon flag. And I don't remember,  
23      sitting here right now, reviewing any  
24      documents about their program.

25             Q.    So you did not review any

1

2 documents regarding Cephalon's  
3 investigation of any transactions or orders  
4 that it may have flagged, correct?

5 MS. CONROY: Objection.

6 A. Correct. That would be outside  
7 of my scope, too.

8 Q. Turn to paragraph 69.

9 A. I'm sorry, paragraph 69, not  
10 page?

11 Q. Yes. It's on page 21. Sorry.

12 A. I am there.

13 Q. Okay. Did you review any  
14 documents regarding Teva's SORDS of one  
15 system?

16 A. Yes.

17 Q. So I see here --

18 A. I'm sorry, SORDS I?

19 Q. Yes. Here in paragraph 69 you  
20 say, "Teva's SOMS system (referred to as  
21 SORDS II) was in effect from approximately  
22 2012 to 2015, when it was replaced by a  
23 system called DefOps," D-e-f, O-p-s.

24 A. So SORDS I, I recall maybe  
25 briefly seeing some documentation on it,

1

2 but I think mostly -- I'm thinking most  
3 clearly about the ones that are referenced  
4 here.

5 Q. Okay. And so you did not attempt  
6 to apply any algorithms from Teva's SORDS I  
7 program to any of the data, correct?

8 A. Correct. If they're not here,  
9 then we didn't apply them. But we could if  
10 asked.

11 Q. And did you review any documents  
12 regarding Teva's DefOps system?

13 A. Yes.

14 Q. And I think you referenced them  
15 in paragraph 70 if you want to look at  
16 that.

17 A. Thank you.

18 (Document review.)

19 Q. You did not apply the algorithm  
20 used by Teva's DefOps system to any of the  
21 data discussed in your report, correct?

22 A. I'd have to look at the document,  
23 I'm sorry, I'm getting a little fuzzy  
24 today. But it appears, yes, we did not  
25 implement it because it was not -- we

1

2       weren't able to programmatically implement  
3       it.

4           Q.    Okay.  And you're aware that the  
5       DefOps program, as you state here, went  
6       into effect in 2015; is that right?

7           A.    That is what it states here.  And  
8       I believe there's transcripts that state  
9       that.

10          Q.    But you did -- but you did apply  
11       the algorithm used by Teva's SORDS II  
12       system, that right, correct?

13          A.    That appears to be correct.

14          Q.    Okay.  And you gathered  
15       information about that algorithm through a  
16       review of something called the Buzzeeo -- or  
17       what you referred to as the Buzzeeo/Cegedim  
18       compliance report in paragraph 69; is that  
19       correct?

20          A.    That is what we cite, yes.

21          Q.    Okay.  Did you review any  
22       documents besides the Buzzeeo/Cegedim  
23       compliance report to gather information  
24       about Teva's SORDS II system?

25          A.    If they're cited here, I'd have

1

2 to look at which Bates numbers applies to  
3 which document.

4 Q. But you don't recall reviewing  
5 any other documents besides the Cegedim,  
6 the Buzzeeo/Cegedim compliance report?

7 A. If I did, they're in my reliance,  
8 but not that I can recall sitting here and  
9 talking to you.

10 Q. In paragraph 69, you state that  
11 your report or your report states that  
12 "Under the SORDS II program, orders by NDC  
13 that were more than three standard  
14 deviations above the customer's consents  
15 monthly mean were flagged by Teva."

16 Do you see that?

17 A. I do.

18 Q. About halfway down that  
19 paragraph, you note that "Any order that is  
20 in excess of the three standard deviations  
21 above the mean is pended for further  
22 investigation."

23 Do you see that?

24 A. Yes, I see that quote. It's in  
25 quotes.

1

2           Q.    "And that the monthly mean was  
3 refreshed periodically."

4                   Do you see that as well?

5           A.    I do see that.

6           Q.    Which you understood to mean that  
7 "The mean and standard deviation were  
8 calculated approximately twice per year  
9 using the most recent six months of data."

10                   Do you see that?

11          A.    I do see that.

12          Q.    When you say "six months of  
13 data," what data are you referring to?

14          A.    So that would be the chargeback  
15 data that it would be applied to.

16          Q.    And so your understanding is that  
17 the system, excuse me, that the monthly  
18 mean was refreshed periodically and that  
19 the mean and standard deviation were  
20 calculated approximately twice per year  
21 using the most recent six months of  
22 chargeback data?

23          A.    So we applied it to the  
24 chargeback data. And so when we're making  
25 this assumption, we're assuming that the

1

2       most recent six months, so let's say we're  
3       doing the report on -- let's make it easy  
4       on myself -- on February would be like  
5       January and then the preceding six months  
6       to that. And then that block would be  
7       refreshed to include the next six months.

8           Q.    Okay. Did you review any orders  
9       that Teva had received?

10          A.    Any orders that Teva had  
11       received...

12                   Not unless they appeared in the  
13       chargeback data.

14          Q.    And did you review any data that  
15       Teva had about its orders that was  
16       available to Teva at the time the orders  
17       were made?

18          A.    No. That would be outside of  
19       this report.

20          Q.    Did you determine whether the  
21       Teva transactions flagged by your various  
22       metrics, by various metrics in your report  
23       were also flagged by the Teva defendants'  
24       SOM systems?

25                   MS. CONROY: Objection.

1

2           A.    I would not know.

3           Q.    Did you look to see if those  
4 transactions were flagged by those systems?

5           MS. CONROY:  Objection.

6           A.    Again, I wouldn't know.  It was  
7 not asked of me.

8           Q.    And so you did not review any  
9 documents regarding investigations of  
10 pending orders in those systems; is that  
11 accurate?

12          A.    Not that I can recall.  That  
13 would have been outside of my expertise to  
14 review those.

15          Q.    I know we discussed this a little  
16 bit before, but I want to make it clear for  
17 the record.

18                On page 9 of your report, in  
19 paragraph 22, you say that "The report  
20 focuses specifically and exclusively on  
21 manufacturers' anti-diversion and  
22 suspicious order monitoring programs,"  
23 correct?

24          A.    Correct, it does state those  
25 words.



1

2           Q.    And is that what you were  
3           endeavoring to offer an opinion on, the  
4           suspicious order monitoring programs?

5           MS. CONROY:  Objection.

6           A.    No.  I think as we stated  
7           earlier, and it's my intention to answer  
8           this the same as I have before, but I was  
9           asked to apply the known compliance metrics  
10          to labelers' data including chargebacks and  
11          IQVIA data.

12          Q.    Okay.  So you're not offering any  
13          opinions today that the Teva defendants  
14          failed to flag a potentially suspicious  
15          order, correct?

16          A.    Correct.

17          MS. CONROY:  Objection.

18          A.    Outside of my scope.

19          Q.    Similarly, you're not offering  
20          any opinions today or in your report that  
21          the Teva defendants failed to detect and  
22          report a suspicious order, correct?

23          A.    Correct.  That would be outside  
24          of my expertise.

25          MR. HAMMOUD:  All right.  That's

1

2

all the questions I have. Thank you

3

very much for your time.

4

THE WITNESS: Thank you.

5

THE VIDEOGRAPHER: The time is

6

5:25 p.m. We are now off the record.

7

(Recess is taken.)

8

(Keller Exhibit 20, Report of

9

Edward J. Buthusiem of Berkeley

10

Research Group, not Bates-stamped,

11

marked for identification, as of this

12

date.)

13

THE VIDEOGRAPHER: The time is

14

5:27 p.m. We are back on the record.

15

EXAMINATION BY

16

MR. GOLDSTEIN:

17

Q. Good afternoon, Ms. Keller. My

18

name is Josh Goldstein with the law firm of

19

Ropes & Gray. I represent Mallinckrodt,

20

LLC.

21

I've placed in front of you

22

what's been marked as Exhibit 20.

23

Do you recognize that document?

24

A. I do.

25

Q. Have you reviewed that document?

1

2           A.    I have.

3           Q.    And for the record, what is that  
4 document?

5           A.    It is a report by Edward  
6 Buthusiem, I'm not sure if I'm saying that  
7 correctly.

8           Q.    We can go with your pronunciation  
9 for the first -- for today's deposition.

10                   And when did you first review it?

11           A.    I would say either in late May or  
12 early June.

13           Q.    Do you recall for how long you  
14 reviewed it?

15           A.    How long did it take me to read  
16 it?

17           Q.    Sure.

18           A.    For as long as it takes to read.  
19 I don't know, maybe an hour it takes to  
20 read.

21           Q.    Were you asked to offer any  
22 opinions based on Mr. Buthusiem's report?

23           A.    No.

24           Q.    Do you intend to offer an opinion  
25 at trial regarding his report?

1

2           A.    I'm not certain.

3           Q.    Have you conducted any additional  
4 analysis as a result of your review of  
5 Mr. Buthusiem's report?

6           A.    Yes.

7           Q.    Could you describe that, please?

8           A.    I reviewed his work and our work  
9 as well.

10          Q.    And when you say his work and  
11 your work, could you elaborate?

12          A.    The examples that he cites in his  
13 report.

14          Q.    Did you review the materials --  
15 strike that.

16                   Did you just review the report  
17 that's been placed in front of you or did  
18 you review materials he relied on?

19          A.    I also reviewed his reliance.

20          Q.    I think this is probably  
21 encompassed in what I've already asked, but  
22 if I'm understanding you correctly, you  
23 don't intend to supplement your report as a  
24 result of your review of his report?

25          A.    Not that I'm aware of at this

1

2           time.

3

          Q.    Okay. Did you form a general  
4           impression of his report?

5

          A.    No.

6

          Q.    Do you recall generally the main  
7           points that Mr. Buthusiem makes in his  
8           report?

9

          A.    I do.

10

          Q.    What are they?

11

          A.    He discusses chargebacks to a  
12           great degree and then discusses some of our  
13           processing of the data. I would say not  
14           even processing, more our analysis of the  
15           data. And then I would say a third piece  
16           would be to describe how Mallinckrodt's --  
17           I don't know how to word this  
18           appropriately, forgive me, it's getting  
19           late in the day -- to describe how  
20           Mallinckrodt views using its different data  
21           sets available to them, to the labeler.  
22           I'm sorry if that's not clear.

23

          Q.    I think I understand you.

24

                  Which data sets are you referring  
25           to in particular?

1

2           A.     Specifically he brings up a sales  
3     data set that I thought was interesting to  
4     review.

5           Q.     Sorry to go back to this, but  
6     when you -- have you reviewed his report  
7     since the initial time that you reviewed it  
8     in late May or early June?

9           A.     Yes.

10          Q.     Did you review it in preparation  
11     for the deposition today?

12          A.     Yes.

13          Q.     Do you remember the last time you  
14     reviewed it?

15          A.     Last night.

16          Q.     Now of the three key points that  
17     you just identified, or I don't think you  
18     used the word "key," but the three main  
19     points, I believe is what my question asked  
20     for, do you disagree with any of the points  
21     that Mr. Buthusiem made?

22          A.     I do. I think that -- I do.  
23     I'll just leave it at that.

24          Q.     Okay. Could can you elaborate?

25          A.     I think he misunderstood our

1

2 report and what we were trying to do.

3 Q. And what do you mean by that?

4 What makes you think he misunderstood the  
5 report?

6 A. So he takes to task that we  
7 incorrectly include some orders in our  
8 analysis.

9 What I stated and intended to do  
10 was to provide examples of chargeback  
11 requests that included NDCs that were part  
12 of peculiar orders.

13 Q. I think maybe -- strike that.

14 So I'd like to kind of walk  
15 through some of the statements in his  
16 report and maybe sort of hone in on where  
17 the disagreements might be.

18 A. Sure.

19 Q. So just generally speaking, what  
20 is your understanding of the purpose of  
21 chargeback data?

22 A. As I think I state in the report,  
23 it helps protect the labeler from -- well,  
24 actually, let me make sure I state it  
25 right. I got it right here.

1

2 (Document review.)

3 A. "Submitted by the distributors to  
4 labelers to protect distributors from  
5 profit loss when drugs are sold at" -- "to  
6 a buyer at less than the distributor paid  
7 for them."

8 Q. Did you understand it to be a  
9 type of financial reconciliation mechanism?

10 A. If you want to call it that.

11 Q. You wouldn't take issue with that  
12 characterization?

13 A. Yeah, I understand it to be like  
14 maybe like in an colloquial term, a rebate  
15 or something like that. Maybe that --  
16 that's probably not the right word to use,  
17 especially in pharmaceuticals because I  
18 think that means something different there,  
19 but it's helped kind of make somebody  
20 whole. I think I've heard that phrase  
21 used.

22 Q. Understood.

23 So let me frame it this way and  
24 see if you agree or disagree?

25 Is it fair to say that



1

2 distributors provide chargeback data to  
3 manufacturers in order to be compensated  
4 for the difference between the price a  
5 distributor sells the product to a pharmacy  
6 and the price that the distributor paid the  
7 manufacturer for that product?

8 MS. CONROY: Objection.

9 A. I think that's in the same realm  
10 of what I mean to say in 33 but, sure, the  
11 definition is what it is.

12 Q. So just to be clear, you don't  
13 take issue with the definition I just  
14 provided?

15 MS. CONROY: Objection.

16 A. I wouldn't know exactly the  
17 correct definition of a chargeback. That's  
18 not my area of expertise. But it sounds  
19 good to me sitting here.

20 Q. Do you have an understanding of  
21 whether manufacturers purchase chargeback  
22 data from distributors or whether that data  
23 is provided to manufacturers by  
24 distributors?

25 A. I mean, it depends on how you

1

2       define the word "purchase," but I don't  
3       really know how they come to get, but I  
4       know that they have that data.

5           Q.    So you're not aware one way or  
6       the other whether manufacturers purchase  
7       chargeback data from distributors?

8           MS. CONROY:  Objection.

9           A.    Yes, that would be outside of my  
10      expertise of how they came to get the data.  
11      I just know what I was given.

12          Q.    Now a chargeback request is  
13      submitted by the distributor to a  
14      manufacturer after the distributor has  
15      already shipped the order to the pharmacy  
16      or whatever the downstream customer is; is  
17      that right?

18          A.    I don't know for certain because  
19      I'm not an expert in chargebacks.

20          Q.    Is that consistent with your  
21      understanding of how chargebacks work?

22          A.    I would think so, yes.

23          Q.    And a chargeback request is only  
24      submitted by a distributor to a  
25      manufacturer for sales that a distributor

1

2       made to a distributor's customer; is that  
3       fair to say?

4             A.    I think that's fair to say.

5             Q.    And of sales that a distributor  
6       makes to a distributor's customer, not  
7       every sale is eligible for a chargeback  
8       with respect to the manufacturer; is that  
9       right?

10            A.    Yes, I think we state that in our  
11       report that some percentage, depending on  
12       the labeler, are submitted for chargebacks  
13       and some are not.

14            Q.    Apologies. I think you might  
15       have testified to this already, but a  
16       manufacturer only has chargeback data for  
17       sales to a distributor of the  
18       manufacturer's own product. Is that your  
19       understanding?

20            A.    Generally, that's my  
21       understanding. I do remember seeing, and  
22       it may have been an invalid NDC code issue,  
23       some crossover between labelers where NDCs  
24       of one labeler were in another labeler's  
25       chargeback request. But they were very,

1

2       very tiny, and I assumed that it was just  
3       an error in the data.

4               Q.     Okay.   Understood.

5                       And that is true regardless of --  
6       strike that.

7                       That's true even in situations  
8       where a company is selling its own generic  
9       product of another manufacturer's branded  
10      products?  Is that your understanding?

11              A.     Help me get a better question.

12              Q.     Sure.

13                     Do you have an understanding of  
14      the difference between a generic  
15      manufacturer and a branded manufacturer?

16              A.     I understand that some drugs are  
17      generic and some drugs are brand name, yes.

18              Q.     And what is your -- can you  
19      describe that understanding?

20              A.     I mean, I don't really -- I don't  
21      have expertise or deep knowledge in what  
22      goes in behind that, but I understand that  
23      when I match it to an FDA file, some have a  
24      brand name B next to them and some drugs,  
25      NDCs, have a G for generic.  I don't know

1

2       if that's actually how it shows up in the  
3       data, but in simplest terms, that's -- I do  
4       understand that there's be a distinction  
5       between the two.

6           Q.    Okay.  And so as far as you know,  
7       the manufacturer of a generic product only  
8       gets chargeback data for that product;  
9       doesn't get chargeback data from any other  
10      manufacturer?

11           MS. CONROY:  Objection.

12           A.    I would say in the data that I  
13      saw and used, I only saw manufacturer's own  
14      data.  And it generally reflected the NDC  
15      codes that I understood them to label based  
16      off of the labeler mappings from FDA and  
17      DEA.

18           Q.    Okay.  I'd like to ask you to  
19      turn to paragraph 13 of Mr. Buthusiem's  
20      report.  It's on page 5.

21                   (Witness complies.)

22           Q.    And what I'd like to do is walk  
23      through some of the statements in this  
24      report.

25                   So the first sentence,

1

2 Mr. Buthusiem writes, "Across the  
3 pharmaceutical industry, chargeback  
4 requests from distributors to manufacturers  
5 do not indicate what specific product  
6 inventory, i.e. which particular bottles or  
7 packages, the distributor used to fulfill  
8 the sale to the downstream registrant."

9 Do you see that?

10 A. I do.

11 Q. Do you agree with that statement?

12 A. I really wouldn't know. It's  
13 outside of my expertise.

14 Q. So you have no reason to disagree  
15 with that statement?

16 A. I wouldn't have the expertise to  
17 agree or disagree.

18 Q. Okay. Skipping down to the  
19 sentence in the middle of the paragraph  
20 that starts "As such," do you see that?

21 A. I do.

22 Q. And the underlying portion reads.  
23 "The manufacturer cannot use chargeback  
24 data to trace a downstream sale back to the  
25 specific original direct manufacturer to

1

2 distributor sale or sales."

3

Do you see that?

4

A. I do see that.

5

Q. And do you agree with that

6

statement?

7

A. I do not.

8

Q. Which part do you disagree with?

9

A. Which part? I'm sorry. Ask me a

10

different question or --

11

Q. Sure.

12

What do you disagree with about

13

that statement?

14

A. So I believe in my report we do

15

trace the chargeback data back to the --

16

for a second.

17

So he refers to sales data. I

18

didn't review sales data. So I actually

19

couldn't be certain if you could trace a

20

chargeback back to sales data.

21

What I had available to me was

22

chargeback data and peculiar order data.

23

Q. Just so the record is clear, what

24

sales data are you referring to that

25

Mr. Buthusiem reviewed that you said you

1

2       didn't review?

3               A.     There is a cite here.   The direct  
4     sales transaction, 1998 to -- that's in  
5     footnote 9, MNKT1\_0007897646.

6               Q.     Okay.   And that's data that you  
7     did not review in connection with your  
8     report?

9               A.     That is correct.

10              Q.     And have you reviewed it since --  
11     have you ever reviewed that data?

12              A.     I have.

13              Q.     You reviewed it after you  
14     prepared your report?

15              A.     I did.

16              Q.     So now that that data has been  
17     made available to you, does it change your  
18     opinions at all that you offer in your  
19     expert report?

20              A.     I'm really not sure at this time.  
21     I haven't fully completed my analysis.

22              Q.     Is it fair to say you're in the  
23     process of making that determination?

24              A.     I don't know if I will or will  
25     not.   I just don't know.



1

2 Q. But have you begun that analysis?

3

4 A. I would say I've reviewed the  
5 data sources that he has used and used his  
6 report, and that's where we are right now.

6

7 Q. At this time, do you have any  
8 reason to disagree with -- strike that.

8

9 At this time, are there any  
10 opinions that you intend to offer based on  
11 your review of the direct sales data?

11

12 A. I do not plan to offer opinions  
13 today on the direct sales data or -- and I  
14 don't know if I will.

14

15 MR. GOLDSTEIN: I'm just going to  
16 note for the record that defendants  
17 will reserve all rights in connection  
18 with any late-disclosed opinions,  
19 particularly those opinions that  
20 respond to Mr. Buthusiem's report.

20

BY MR. GOLDSTEIN:

21

Q. Bear with me one second.

22

A. Take your time.

23

24 Q. So you testified just now that  
25 you couldn't be certain if it's possible to  
trace a chargeback to the -- trace a

1  
2 chargeback from the sale from the  
3 manufacturer to a distributor and then from  
4 a distributor to the distributor's  
5 downstream customer.

6 Do you recall that?

7 A. So I think what I was saying is  
8 because I haven't fully reviewed the sales  
9 data, I don't know what would be possible.  
10 So that was -- I think I started making a  
11 statement but needed to clarify that.  
12 Because I haven't used this direct sales  
13 data and done this analysis, I don't know  
14 the answer.

15 Q. Okay. At this point, you're not  
16 aware of any information in the direct  
17 sales data that would enable you to trace a  
18 manufacturer's sale to a distributor, to  
19 then a distributor's sale to a downstream  
20 customer?

21 A. I'm really not prepared to answer  
22 that either way right now.

23 Q. So I was just asking if you're  
24 aware of any information at this point.

25 A. I just -- I've reviewed the file

1

2 fairly quickly. I'm just really not  
3 prepared to say what's in the file or what  
4 data points are there or what would be  
5 possible to review. So I just am not  
6 comfortable with saying one way or the  
7 other what is possible or not possible.

8 Q. Oh, I understand. I think my  
9 question is a little different.

10 It's simply, at this point in  
11 time sitting here today, if you are aware  
12 of any information that would enable you to  
13 trace manufacture's sale to a distributor,  
14 trace that order from the manufacturer to  
15 the distributor to the downstream customer?

16 A. So, again, the data that I used  
17 in my report was peculiar orders and  
18 chargebacks. The data that's mentioned  
19 here that I've only briefly reviewed is  
20 sales. So I can't offer an opinion or a  
21 statement at this time about sales.

22 Q. So what I'm trying to understand  
23 is that based on your review thus far,  
24 understanding that it's incomplete review  
25 of the Mallinckrodt direct sales data, if

1

2       there's any information that you've come  
3       across to date that would enable you to  
4       trace the manufacturer's sale to a  
5       distributor, to then the sale by the  
6       distributor to a downstream customer?

7               MS. CONROY: Objection. Apart  
8       from her report?

9               MR. GOLDSTEIN: Based on her  
10       review of the Mallinckrodt direct sales  
11       data, which is --

12              MS. CONROY: That's what you're  
13       your question is about, the  
14       Mallinckrodt direct --

15              MR. GOLDSTEIN: Correct.

16              MS. CONROY: Okay. Why don't you  
17       ask it again, then.

18              MR. GOLDSTEIN: Correct.

19              MS. CONROY: That's what's  
20       confusing.

21              MR. GOLDSTEIN: Right. So I  
22       understand the testimony to be that  
23       Ms. Keller can't say whether the direct  
24       sales data that Mr. Buthusiem reviewed  
25       would enable or would not enable

1

2

someone to trace the order all the way

3

from the manufacturer to the downstream

4

customer. And so that's where I'm

5

going with that.

6

MS. CONROY: Okay.

7

BY MR. GOLDSTEIN:

8

Q. So would you like me to repeat

9

the question?

10

A. Yes, please.

11

Q. So based on your review thus far

12

of the Mallinckrodt direct sales data that

13

Mr. Buthusiem cites in his report, do you

14

have any -- are you aware of any

15

information in that data that would enable

16

you to trace a sale from a manufacturer, to

17

a distributor, to then the downstream

18

customer?

19

A. I mean, again, that is a very

20

long chain that you've outlined here. I

21

would need to fully review it to make -- to

22

make an actual assertion.

23

I mean, if there's NDC codes in

24

there, that's where we would start. But

25

beyond that, I don't -- I'm not prepared to

1

2 talk about that right now.

3

Q. So I think I've asked this  
4 question about five times.

5

All I'm asking is what you're  
6 aware of today, not what you could ever  
7 possibly be aware of at some future point  
8 down the road.

9

So as far as, as you sit here  
10 today what you're aware of and not aware  
11 of, it sounds like you're not aware of any  
12 information that would enable you to trace  
13 an order from a manufacturer, to a  
14 distributor, to the downstream customer?

15

MS. CONROY: Objection.

16

A. I'm not going to say aware or not  
17 aware because I haven't fully reviewed the  
18 data set. If you want to pull it out, I'd  
19 be happy to look at it right now, but I  
20 don't remember what column headers are in  
21 there. I don't know what fields are in  
22 there. I just -- those are things that I  
23 would need to know to be aware or not aware  
24 and I just -- I would be happy to look at  
25 it right now if you want to pull it up on a

1

2 computer, but...

3

Q. Sitting here today, you don't  
4 recall if you're aware or not of whether  
5 there is any information in that direct  
6 sales data that would change your analysis?

7

A. So sitting here, I do not have  
8 the familiarity with the data set that  
9 would allow me to answer the question  
10 either way, that I am aware or unaware,  
11 because I would just have to look at the  
12 data set more closely to be able to answer  
13 the full question of being able to trace  
14 from here to here to here.

Q. Okay. Well, let me move on and  
16 ask a slightly different question. I think  
17 everyone is growing weary of that one.

18 If you turn to your report,  
19 paragraph 158. It's on page 84.

20 A. Yes.

Q. And there, you reference roughly  
22 2,900, I think if you look at table 74,  
23 it's 2,860 peculiar orders, or to be clear,  
24 orders that Mallinckrodt had deemed  
25 peculiar based on its own monitoring system

1

2       that involved distributors that shipped the  
3       same opioid product purchased in a peculiar  
4       transaction to buyers in either Summit  
5       County or Cuyahoga County within 30 days.

6                   Do you see that reflected in your  
7       report?

8           A.    I do.

9           Q.    Okay.  And so my question is,  
10       sitting here today, based on whatever  
11       you've reviewed to date, can you state with  
12       100 percent certainty that any of those  
13       2,860 orders that are referenced in table  
14       74 were shipped themselves into Cuyahoga or  
15       Summit County?

16           A.    So the question is -- can you  
17       state it a little bit more succinctly for  
18       me?

19           Q.    Sure.  Let me try again.

20                   Can you state with 100 percent  
21       certainty that any of the 2,860 orders that  
22       are identified in table 74 -- you see those  
23       orders that I'm talking about?

24           A.    I do.

25           Q.    Okay.  If any of those orders



1

2       were definitively shipped into Cuyahoga or  
3       Summit County as opposed to shipped  
4       somewhere else?

5           A.     So those orders contained an NDC  
6       product that was deemed peculiar at some  
7       point by Mallinckrodt in the previous 30  
8       days that went to a Summit or Cuyahoga  
9       County buyer.

10          Q.     So your testimony sitting here  
11       today is that you can definitively trace  
12       the orders that were placed by a  
13       distributor to Mallinckrodt, these 2,860  
14       orders, that Mallinckrodt -- let me back  
15       up.

16                Mallinckrodt, your understanding  
17       is that Mallinckrodt shipped those orders  
18       to various distributors, correct?

19          A.     So you've got two points in  
20       there. That Mallinckrodt shipped to those  
21       distributors or -- I'm sorry, I just don't  
22       really follow your question.

23          Q.     I'll start over. That's fine.

24                So the 2,860 peculiar orders that  
25       are identified in table 74, your

1

2       understanding is that those orders were  
3       placed by a distributor to Mallinckrodt,  
4       correct?

5             A.    Yes.

6             Q.    And as far as you know,  
7       Mallinckrodt shipped those orders to  
8       various distributors, correct?

9             A.    I would -- yes, I think because  
10       these are peculiar orders. So at some  
11       point, yes, I would assume that that --  
12       they were deemed peculiar so -- I don't --  
13       let me state this more completely. And I'm  
14       sorry, my brain is getting fuzzy.

15                   They appear in the peculiar order  
16       data for Mallinckrodt, and these are the  
17       distributors that are in that data.

18                   Whether or not those were  
19       actually shipped or unshipped, I couldn't  
20       answer as to whether, whether that  
21       happened.

22             Q.    So I guess now I'm a little  
23       confused. I thought that your report is --  
24       in your report, I thought you're saying  
25       that these are orders that were shipped

1

2       into Cuyahoga or Summit County; is that  
3       right?

4           A.     So that's the chargeback  
5       component. We looked at chargeback data  
6       and peculiar order data.

7           Q.     Okay.

8           A.     So to the extent that a  
9       chargeback existed, one has to make the  
10      assumption that it made it there, that the  
11      product made it there.

12          Q.     Well, let me follow up with  
13      something you said.

14                 Are you aware of any  
15      identification code or any data contained  
16      within chargeback data, the peculiar order  
17      data, or any other data that links a  
18      peculiar order and a chargeback?

19          A.     Well, yes.

20          Q.     What data is that?

21          A.     So I mean, we'd have to consult  
22      how we did this in the code, but there's --  
23      you would need the NDC code of the  
24      products, as well as the distributor that  
25      that product went through.

1

2           Q.    Okay.  So let me go back to my --  
3           go back a couple of questions which is, as  
4           far as you know, the way the supply chain  
5           works is, distributor places an order with  
6           a manufacturer, we established that.  The  
7           manufacturer ships the order to the  
8           distributor?

9           A.    Yes.

10          Q.    Okay.  So once the distributor  
11          has obtained the order, the distributor has  
12          inventory of that product, whatever product  
13          was contained in that order.

14                   Is that your understanding?

15          A.    I think I've seen data that  
16          reflects what you're trying to say, yeah.

17          Q.    Do you have an understanding  
18          of -- I guess I should put it this way:  Do  
19          you have an understanding of how an order  
20          placed by a distributor to a manufacturer  
21          ends up -- well, strike that.

22                   Do you have an understanding of  
23          how the 2,860 orders that you identify in  
24          table 74 were shipped into Cuyahoga or  
25          Summit County as you have opined?

1

2

MS. CONROY: Objection.

3

4

5

A. How they were shipped, like what was the method that they arrived in Summit County?

6

7

8

Q. Yes. They were shipped there by a distributor into Summit or Cuyahoga County.

9

Is that your opinion?

10

11

12

13

14

15

A. I guess I don't really understand the question. I'm sorry if I'm -- I'm not trying to be obstinate. I just don't understand. Are you asking me -- I just don't understand quite what you're asking me.

16

17

18

Q. What I'm getting at is that, once a, once product is shipped -- I'll start over.

19

20

21

22

23

Do you have an understanding of whether distributors that receive products from manufacturers typically hold inventory of the product that they are purchasing beyond the single order that was purchased?

24

25

A. I have no expertise in what the inventory practices are of distributors.

1

2           Q.    So you don't know if, for  
3           example, if a distributor purchases --  
4           places an order with Mallinckrodt for one  
5           of its products, you don't know if -- and  
6           Mallinckrodt ships it to that distributor,  
7           the product that was purchased, you don't  
8           know if the distributor would have other of  
9           Mallinckrodt's products already in its  
10          inventory at the time it places that order?

11          A.    Correct. I'm not an expert in  
12          supply chain, nor am I an expert in  
13          distributor LIFO or any of their practices  
14          there, nor do I -- you had another point in  
15          there, but, no, that would be outside of my  
16          expertise. Actually, nor was I given data  
17          on those practices.

18          Q.    Okay. And if a distributor at  
19          the time it placed an order that the  
20          distributor deemed -- that that -- strike  
21          that.

22                    If a distributor in its inventory  
23          had product from Mallinckrodt that was  
24          purchased via multiple orders --

25                    Are you with me so far?

1

2           A.     Yeah.

3           Q.     Okay.  If that was the case, do  
4     you have an understanding of whether it  
5     would be possible for Mallinckrodt to  
6     determine whether any -- or whether  
7     chargeback data provided to Mallinckrodt  
8     would reflect whether any product that's  
9     ultimately shipped into Cuyahoga or Summit  
10    County is from a particular order that was  
11    placed to Mallinckrodt?

12           A.     I'm sorry, I'm rereading your  
13    question here to make sure I understand.

14           Q.     Take your time.

15           MS. CONROY:  Object to the  
16    question.

17           A.     I just don't... I don't really  
18    know how to answer this question because  
19    I've got chargeback data, correct, but as  
20    we've discussed, I haven't reviewed the  
21    sales data, and I have peculiar orders  
22    data.

23                    But I think all of that is a  
24    little bit mixed together in this question,  
25    so I'm not quite sure what you're trying to

1

2 ask me. And I'm sorry, it might be that  
3 it's late in the day.

4 Q. Well, let's say a distributor has  
5 two orders in its inventory worth of the  
6 same -- the same Mallinckrodt products,  
7 okay?

8 A. Okay. Let's go with that. This  
9 is good.

10 Q. One order has been deemed by  
11 Mallinckrodt to be peculiar.

12 A. Okay.

13 Q. The other has not.

14 A. Okay.

15 Q. The distributor then ships some  
16 portion of its inventory of that  
17 Mallinckrodt product into -- to a pharmacy  
18 located in Cuyahoga or Summit County, okay?

19 A. Okay.

20 Q. Are you aware of any way to  
21 determine, for Mallinckrodt to determine  
22 through the use of chargeback data whether  
23 any of the product that was shipped into  
24 Cuyahoga or Summit County was part of what  
25 had been flagged as peculiar?



1

2           A.     Well, yes. I think that's what  
3     we do in our analysis where that -- some of  
4     the -- so an order of an NDC product that  
5     was ultimately shipped to Summit or  
6     Cuyahoga County resulted in a chargeback  
7     request within the next 30 days.

8           Q.     But you, sitting here today,  
9     can't say with certainty whether the  
10    chargeback request that was sent was for  
11    product that was flagged as peculiar or it  
12    was from other product that was in the  
13    distributor's inventory that was not  
14    flagged as peculiar?

15           MS. CONROY: Objection.

16           A.     So because there was many  
17    products shipped after which it was being  
18    deemed peculiar to a distributor, you're  
19    saying because you continued shipments  
20    after they were deemed peculiar, that  
21    that -- you're trying to ask me if that  
22    deems it impossible to trace a chargeback?

23           Q.     No. I'm asking if the  
24    distributor requests a chargeback from  
25    Mallinckrodt -- strike that. Let me move

1

2           on.

3

                  You selected a 30-day cutoff as  
4           part of your analysis of Mallinckrodt's  
5           peculiar orders?

6

          A.     Sure.

7

          Q.     How did you determine that as the  
8           window of time?

9

          A.     So in reviewing the SOMS  
10           documentation, many algorithms reflected a  
11           30-day lookback. It seemed an appropriate  
12           lookback period. And also looking at  
13           chargeback requests, some companies, I'm  
14           sorry, some distributors submitted them,  
15           what appeared to be maybe on weekly basis,  
16           some on a daily basis, some on monthly  
17           basis. It was all over the place. So the  
18           30 days was chosen based off of those  
19           factors.

20

          Q.     Okay. And without consideration  
21           of any distributors's inventory management  
22           practices, correct?

23

          A.     As I stated earlier, I'm not an  
24           expert in inventory management, nor did I  
25           review those types of documents.

1

2           Q.    Okay.  So the answer is, yes,  
3           that is correct, that you did not consider  
4           distributors's inventory management  
5           practices when setting the 30-day cutoff?

6           A.    I would consider inventory  
7           management practices to be out of my  
8           expertise.  And so the 30-day cutoff was  
9           based off of our review of other documents.

10          Q.    Okay.  Now if you turn to page 8  
11          of Mr. Buthusiem report.  You recall that  
12          Mr. Buthusiem states that some of the --  
13          you made some errors with respect to the  
14          code in your report.

15                Do you recall that?

16          A.    I do recall reading that.

17          Q.    And have you gone back and looked  
18          at whether those errors in fact occurred?

19          A.    I think he's just  
20          misunderstanding what we tried to do in the  
21          report.

22          Q.    And how so?

23          A.    We show orders that contained NDC  
24          products that were deemed in a peculiar  
25          report -- that were deemed peculiar.

1

2 Q. And is that true even if --

3 strike that.

4 Is it your testimony that all of

5 the 2,860 peculiar orders had involved

6 situations where the distributor who made

7 the chargeback request was the same as the

8 distributor who placed the peculiar order?

9 A. I think the 2,860 peculiar orders

10 that we identified involved different

11 distributors, not just one.

12 Q. Right.

13 What I'm saying is, for any --

14 let's just pick one of those 2,860 peculiar

15 orders.

16 For that order, are you aware of

17 situations in which of those 2,860 orders,

18 any one of them individually, the

19 distributor who placed -- who made the

20 chargeback request was different from the

21 distributor who was identified as having

22 placed a peculiar order?

23 A. So for us -- to appear in this

24 list, they had to have of shipped -- this

25 list contains orders that were traced to

1

2 Summit and Cuyahoga after which an NDC  
3 product within that order was deemed  
4 peculiar.

5 Q. Would you have included in your  
6 list of 2,860 orders any order in which the  
7 distributor who placed the chargeback  
8 request to Mallinckrodt was different from  
9 the distributor who was identified as  
10 having placed a peculiar order initially  
11 from Mallinckrodt?

12 A. I mean, there's lots going into  
13 that calculation, whether or not it was in  
14 the 30 days of the same order, if it was on  
15 the same day, if it was the same  
16 distributor, if it was the same NDC code.  
17 There is a lot that goes into that  
18 analysis.

19 Q. But your analysis attempts to  
20 link peculiar order placed by distributor  
21 to Mallinckrodt with a chargeback request  
22 that was provided by a distributor to  
23 Mallinckrodt reflecting an order that was  
24 shipped into Summit or Cuyahoga; is that  
25 right?

1

2           A.    So, yes, to the extent that the  
3           chargeback reflects the shipment and the  
4           peculiar order is the other half of the  
5           equation, yes. I'm not trying to state  
6           that the peculiar orders were shipped.

7           Q.    Let me ask it this way:

8           Paragraph 158 of your report, you say, "I  
9           identified around 2,900 peculiar orders  
10          that involved distributors that shipped the  
11          same opioid product purchased in the  
12          peculiar transaction to buyers in either  
13          Summit or Cuyahoga County within 30 days."

14          Okay?

15          A.    I state that.

16          Q.    Okay. And the next sentence  
17          says, "With chargeback data, Mallinckrodt  
18          was able to see where a peculiar orders  
19          went."

20          Do you see that?

21          A.    I state that as well, yes.

22          Q.    Okay. So in order for -- in  
23          order to be included in one of these 2,860  
24          peculiar orders, it would, by definition,  
25          need to be an order that was placed by a

1

2 distributor to manufacturer or that was  
3 deemed peculiar by Mallinckrodt and then  
4 the same distributor submitted a chargeback  
5 request to Mallinckrodt for what you're  
6 saying reflects that same order, right?

7 A. It's just it's complicated,  
8 right, because we're looking at the time  
9 periods and NDC codes.

10 Q. I really don't think it's that  
11 complicated. I think it's a simple  
12 question that you have a distributor where  
13 you're saying the distributor, the same  
14 distributor placed an order from  
15 Mallinckrodt, shipped it into Cuyahoga or  
16 Summit County and then submitted a  
17 chargeback request to Mallinckrodt.

18 So all I'm asking is, is it, by  
19 definition, the same distributor that  
20 placed the order and submitted the  
21 chargeback request?

22 That's a simple "yes" or "no"  
23 question.

24 A. Yes. I think our code would  
25 reflect that.

1

2           Q.    Okay.  And so if your code  
3           reflected -- in there was an error in your  
4           code whereby you had a distributor, whereby  
5           you had different distributors, that would  
6           be an error in your code?

7                     If there was a different  
8           distributor who placed the order and  
9           submitted the chargeback request, that  
10          could not be for the same order?

11          A.    I think the code shows that it  
12          has a 30-day window, an order that contains  
13          the NDC product through that distributor.

14          Q.    The same distributor?

15          A.    I would think so, yes.

16          Q.    Okay.  And if there was an order  
17          where it wasn't the same distributor, that  
18          would reflect an error in your code?

19                     MS. CONROY:  Objection.

20          A.    I would have to look at the full  
21          facts behind that before I'd say whether or  
22          not it would.

23          Q.    It should not have been included  
24          in the 2,860 peculiar orders in table 74?

25                     MS. CONROY:  Objection.



1

2           A.    I would like to look at the order  
3           before making an assertion as to whether  
4           or not it would be an error or not.

5           Q.    It's possible that an order  
6           placed by a distributor and then a  
7           chargeback request submitted by a different  
8           distributor could be the same order  
9           reflected in these 2,860 in table 74?

10          A.    I mean, I'm not going to talk  
11          about what's possible and not possible  
12          without looking at the data.

13               MR. GOLDSTEIN:  I'll pass the  
14          witness.  I'll reserve my rights.  I  
15          don't think I've gotten responsive  
16          answers to my questions.

17               THE VIDEOGRAPHER:  The time is  
18          6:12 p.m.  We are now off the record.

19               (Recess is taken.)

20               THE VIDEOGRAPHER:  The time is  
21          6:17 p.m.  We are back on the record.

22          EXAMINATION BY

23          MR. HYNES:

24               Q.    Good evening, Ms. Keller.  My  
25          name is Paul Hynes.  I represent CVS

1

2 Indiana, LLC and CVS RX Services, Inc.

3 I just have a few questions about  
4 Section L of your report where you address  
5 certain pharmacies.

6 So if you want to turn to those  
7 pages, that would be helpful?

8 A. Sure.

9 Q. I want to first turn your  
10 attention to paragraph 127 on page 63.

11 A. I am there.

12 Q. In the first sentence, you say  
13 "The section that follows analyzes  
14 suspicious pharmacies about which labelers  
15 could have known and reported."

16 Do you see that?

17 A. I do.

18 Q. Okay. What do you mean by  
19 "suspicious pharmacies"?

20 A. So I think I had been asked this  
21 question before, and I intend to answer it  
22 the same way as before, but when I say  
23 "suspicious," I mean they've triggered the  
24 compliance metrics that we applied to the  
25 data.

1

2           Q.    Okay.  So you're not saying that  
3           any labeler had an obligation to report  
4           those pharmacies to the DEA?

5           A.    That would be outside of my  
6           expertise.

7           Q.    Okay.  Do you intend to offer an  
8           opinion at trial that these pharmacies were  
9           suspicious?

10          A.    Not beyond how I've defined  
11          "suspicious" here today.

12          Q.    Okay.  So your opinion about  
13          these pharmacies at trial would be limited  
14          to the fact that they had orders that hit  
15          on one of the compliance metrics that you  
16          were asked to use?

17          A.    That would be a correct  
18          characterization.

19          Q.    Okay.  Thank you.

20                In reviewing the orders placed by  
21          these pharmacies or the shipments made to  
22          them, did you consider whether there were  
23          any legitimate reasons to explain their  
24          purchasing or ordering habits?

25          A.    That would be outside of my

1

2 expertise.

3 Q. Okay. So you didn't consider the  
4 location of the pharmacies?

5 A. That would be outside of what I  
6 was asked to do.

7 Q. Okay. Did you consider whether  
8 they're located near any medical  
9 facilities?

10 A. I think there is one pharmacy  
11 where we show -- I think for -- in the New  
12 Choice one, we show another pharmacy,  
13 Cleveland Clinic, to demonstrate those that  
14 are near medical facilities. But beyond  
15 that example, I don't have any others.  
16 That would be outside of my --

17 Q. Did you consider whether the CVS  
18 pharmacy at 8000 Euclid Avenue is located  
19 near the Cleveland Clinic's main campus?

20 A. Yeah, that would be outside of my  
21 expertise.

22 Q. Okay. So beyond I think it was  
23 the Church's pharmacy you mentioned, you  
24 didn't consider whether any of the other  
25 pharmacies in Section L of your report were

1

2       located near any medical facilities; is  
3       that correct?

4             A.    So I think you said Church's.

5             Q.    I may have gotten it wrong?

6             A.    It's in the New Choice section --

7             Q.    New Choice.

8             A.    -- on 74 and 75.

9             Q.    Okay.  So besides the New Choice  
10       Pharmacy, you didn't consider whether any  
11       of the other pharmacies were located near a  
12       medical facility?

13            A.    Correct.  That was not part of  
14       the assignment.

15            Q.    And you didn't consider the  
16       population density of the area surrounding  
17       the pharmacies?

18            A.    Correct.  That was not part of  
19       the assignment.

20            Q.    So none of the pharmacies you  
21       considered that?

22            A.    Correct.  That was not part  
23       assignment.

24            Q.    And just to confirm, you didn't  
25       visit any of the pharmacies, did you?

1

2           A.    That's correct, I did not visit.

3           That was not asked of me.

4           Q.    And you've testified today that  
5           you considered manufacturer chargeback data  
6           related to these pharmacies, correct?

7           A.    That is correct.

8           Q.    Okay. And you've also testified  
9           that that data is incomplete.

10                  Is that also correct?

11           A.    I don't recall saying  
12           "incomplete."

13           Q.    Okay.

14           A.    I would say that it -- because  
15           the data that I had was a full data set, so  
16           it's not to say that it's incomplete.

17                  I think if -- maybe what you're  
18           referencing is the testimony that it  
19           reflects only a certain percentage of the  
20           total shipments or the total, yeah, the  
21           total shipments or sales made to a county.

22           Q.    It doesn't cover all shipments  
23           made to each of these pharmacies?

24           A.    Correct. I think I characterized  
25           that in my report.

1

2 Q. And did you also consider the  
3 ARCOS data that showed shipments to these  
4 stores?

5 A. I want to make sure that -- yes,  
6 we did. I think it's shown throughout the  
7 report.

8 Q. And just to confirm, that data,  
9 though, only covers shipments of certain  
10 prescription opioids?

11 A. Correct. That data produced to  
12 us had 14 drug codes. I believe only 12  
13 were included.

14 Q. So it didn't have all controlled  
15 substances?

16 A. Correct. It had 12 drug codes.  
17 The two that weren't included were  
18 methadone and buprenorphine.

19 Q. In paragraph 42 on page 14 of  
20 your report, if you want to turn to that  
21 real quick.

22 A. Sorry.

23 Q. Take your time.

24 A. I'm getting cold fingers. All  
25 right. Here we are.

1

2           Q.    The last sentence of paragraph 42  
3           states, "Several monitoring programs  
4           developed by manufacturers and distributors  
5           relied on the percentage of controlled  
6           substances to non-controlled substances as  
7           a metric."

8                   Do you see that?

9           A.    I do.

10          Q.    Okay. Did you consider that  
11          metric in analyzing any shipments made to  
12          the pharmacies in Section L of your report?

13          A.    I would not have been able to.

14          Q.    Why not?

15          A.    Because I was not given access to  
16          the full sales data for a pharmacy.

17          Q.    Did you ask for access to the  
18          full sales data?

19          A.    I've asked for it and I don't  
20          believe that it exists or -- I've asked for  
21          it, I should say.

22          Q.    Okay. And what was the response?

23          A.    And I was told that we didn't  
24          have that.

25          Q.    Okay. So you're not aware that



1

2 CVS and Cardinal have produced complete  
3 shipment data for the CVS pharmacy at 8000  
4 Euclid Avenue?

5 A. I was not provided with that  
6 data.

7 Q. Okay. And did you consider the  
8 expert report of Sonya Kwon where she  
9 quantified the percentage of controlled and  
10 non-controlled substances that were shipped  
11 to the CVS at 8000 Euclid Avenue?

12 A. I have not read that report or am  
13 I familiar with it.

14 Q. Okay. In analyzing these  
15 pharmacies, did you consider whether there  
16 was any regulatory or law enforcement  
17 action taken against any of the?

18 A. That would be outside of the  
19 scope of the report.

20 Q. And did you consider whether  
21 there was any regulatory, law enforcement  
22 or disciplinary action taken against any  
23 pharmacists who worked on those stores?

24 A. Again, that would be outside of  
25 the scope of the report.

1

2

Q. Okay. And did you determine

3

whether any prescription opioids shipped to

4

these pharmacies were diverted?

5

A. Again, that would be outside of

6

the scope of this report.

7

Q. Okay. So just so we can button

8

this all up, you considered chargeback data

9

and ARCOS data related to these stores and

10

that's it?

11

A. And also Purdue's 867.

12

Q. Okay. And Purdue's 867, and that

13

is the extent of the data that you

14

considered related to these stores?

15

A. With the exception of helper

16

files to help clean them up, whether it's

17

an NDC code or MMEs. But as far as data

18

concerning those stores and the

19

transactions about them, then, yes.

20

Q. But that's helper files to help

21

clean up that data, right?

22

A. Correct.

23

Q. And you didn't look at any due

24

diligence files that Cardinal or McKesson

25

or CVS produced related to these stores?

1

2           A.     Correct.   That would be outside  
3     of the scope here.

4           Q.     Okay.

5           MR. HYNES:   I have no further  
6     questions.   Thank you very much.

7           THE WITNESS:   Thank you.

8           THE VIDEOGRAPHER:   The time is  
9     6:26 p.m.   We are now off the record.

10          (Recess is taken.)

11          THE VIDEOGRAPHER:   The time is  
12     6:27 p.m.   We are back on the record.

13     EXAMINATION BY

14     MS. PERSIO:

15           Q.     Hi, Ms. Keller.   Thank you for  
16     being here today.

17           A.     Thanks for having me.

18           Q.     My name is Joanna Persio.   I  
19     represent the Endo and the Par defendants  
20     in this litigation.   I have just a few  
21     questions for you.

22                   I think I know the answers to  
23     these, so hopefully I will be brief.   I  
24     know it's been a long day so far.

25                   Is it correct that you haven't

1

2       done any analysis as to whether any of the  
3       Endo orders identified in your report as  
4       being flagged by the various compliance  
5       metrics that you have applied were or were  
6       not actually investigated or reviewed by  
7       Endo?

8           A.     That is correct. That would be  
9       outside of the scope of the report.

10          Q.     And you also didn't do that  
11       analysis for any of the Par orders that are  
12       identified in your report; is that correct?

13          A.     That is correct. I didn't review  
14       due diligence records or anything like  
15       that. That would be outside of the scope  
16       of the report.

17          Q.     And the answer would be the same  
18       for the entity that you referred to as  
19       Qualitest; in your report, you didn't do  
20       any review or identification of whether or  
21       not those orders that you flagged for  
22       Qualitest were actually investigated by the  
23       entity you referred to as Qualitest?

24          A.     Correct.

25          Q.     So you have no basis to say

1

2       whether or not Endo or Par or Qualitest in  
3       fact flagged or investigated any of the  
4       orders that you flag for those entities in  
5       your report; is that right?

6               MS. CONROY: Objection.

7               A.    Yes. That would be outside of my  
8       expertise. I didn't review that.

9               Q.    And you also couldn't say whether  
10       any of the orders for Endo or Par or  
11       Qualitest were or were not legitimate  
12       orders that should have been shipped after  
13       an investigation?

14              MS. CONROY: Objection.

15              A.    Correct. That would be outside  
16       of the scope.

17              Q.    And you can't say if there are  
18       any specific prescriptions for an Endo, Par  
19       or Qualitest opioid medication that were or  
20       were not legitimate?

21              MS. CONROY: Objection.

22              A.    Correct. That would not be my  
23       area of expertise.

24              Q.    And you're not offering in your  
25       report or planning to offer any opinion as

1

2 to whether or not Endo's investigations of  
3 any orders or any prescribers who are  
4 flagged in your report were or were not  
5 sufficient; is that right?

6 A. Correct. I am not an expert in  
7 that.

8 Q. And you're also not offering or  
9 planning to offer an opinion as to whether  
10 or not any Par's investigations of the  
11 orders or prescribers flagged in your  
12 report were sufficient?

13 A. Correct.

14 Q. I assume the answer is the same  
15 for the entity you referred to as  
16 Qualitest?

17 A. Correct.

18 Q. And you also can't offer any  
19 opinion as to whether or not Endo could  
20 have in fact stopped any of the orders  
21 flagged by the application of your  
22 compliance metrics or stopped any  
23 particular prescriptions in the real world;  
24 is that right?

25 MS. CONROY: Objection.

1

2           A.     Correct. That is outside of my  
3     expertise and scope.

4           Q.     And you can't offer an opinion as  
5     to whether or not Endo should have stopped  
6     any of those orders or prescriptions; is  
7     that right?

8           MS. CONROY: Objection.

9           A.     Correct.

10          Q.     And you also can't comment on  
11     those things for Par or Qualitest, correct?

12          MS. CONROY: Objection.

13          A.     Correct. All that I can talk to  
14     about what could have been done using the  
15     known compliance metrics by -- applied to  
16     the labeler's own data.

17          Q.     But you're not offering any  
18     opinion as to whether or not what was  
19     actually done was adequate or appropriate;  
20     is that right?

21          A.     Correct.

22          MS. PERSIO: I have no further  
23     questions. Thank you.

24          THE WITNESS: Thank you.

25          THE VIDEOGRAPHER: The time is

1

2 6:31 p.m. We are now off the record.

3 (Discussion off the record.)

4 THE VIDEOGRAPHER: Time is

5 6:32 p.m. We are back on the record.

6 FURTHER EXAMINATION BY

7 MR. GOLDSTEIN:

8 Q. Hi, again, Ms. Keller. I'm back  
9 for the remaining five minutes of the  
10 deposition today.

11 Can you turn back to Exhibit 20,  
12 please. And specifically that's  
13 Mr. Buthusiem's report, and specifically  
14 paragraph 13.

15 A. Sure.

16 Q. If you look at the second  
17 sentence of that paragraph, it says, "The  
18 distributor's inventory is comprised of  
19 product purchased over the course of  
20 multiple orders placed with the  
21 manufacturer."

22 Do you have any reason to  
23 disagree with that statement?

24 A. I don't have any reason to  
25 disagree with what he has stated, but



1

2       that's what's stated here.

3

4               Q.    Okay.  The next sentence says,  
5       "The chargeback data submitted with respect  
6       to any eligible distributor to downstream  
7       registrant sale does not delineate which  
8       specific distributor to manufacturer order  
9       relates to the chargeback."

10               Do you have any reason to  
11       disagree with that statement?

12               (Document review.)

13               A.    I don't understand what the word  
14       "eligible" means, so I don't really know if  
15       I can agree or disagree with this.

16               And it's also referencing sales  
17       data that, again, we've discussed earlier  
18       that I haven't reviewed fully.

19               Q.    So let me break that up.  I'll  
20       represent to you that eligible distributor  
21       to downstream registrant sale simply means  
22       a sale for which a chargeback was issued.

23               A.    Sure.

24               Q.    A chargeback eligible sale.

25               Okay.  Does that make sense?

              A.    Sure.

1

2           Q.    Okay.  Now based on the data that  
3           you've reviewed to date and as you sit here  
4           today, do you have any reason to disagree  
5           with the sentence that I just read?

6           A.    And I just assume that there is  
7           an order number, an order ID in both data  
8           sets, is there?

9           Q.    You assume that there is an order  
10          ID in both sets of what?

11          A.    Of both the chargeback data and  
12          the sales data.

13          Q.    That is the same order ID, is  
14          that what you're saying?

15          A.    I would think that that exists.

16          Q.    Okay.  And so if that is the  
17          case -- sorry.  If that is not the case,  
18          then you would not be able to delineate  
19          which specific distributor to manufacturer  
20          order relates to the chargeback?

21          A.    I mean, I'd have to look at the  
22          data sets again to see whether or not I  
23          could trace it or not.  Again, you're  
24          asking me look at data I haven't fully  
25          reviewed.

1

2           Q.    I'm only asking you about  
3           chargeback -- so let me only ask you about  
4           chargeback data for the moment.

5           A.    Okay.

6           Q.    Do you know if chargeback data  
7           anywhere reflects which product in  
8           circumstances where, as discussed in the  
9           sentence immediately prior, where  
10          distributor's inventory is comprised of  
11          product purchased over the course of  
12          multiple orders, okay?

13          A.    Okay. I don't know that there is  
14          a question there, though.

15          Q.    Are you with me so far?

16          A.    Yes.

17          Q.    You understand the situation I'm  
18          talking about is a situation where a  
19          distributor's inventory includes product --  
20          is comprised of product purchased over the  
21          course of multiple orders placed with the  
22          same manufacturer?

23          A.    Yes. I think maybe let's go back  
24          to our example from earlier where you had  
25          the two orders.

1

2 Q. Sure?

3 A. Okay.

4 Q. Chargeback data is submitted for  
5 one of those orders.

6 A. Sure.

7 Q. Are you aware of any information  
8 in the chargeback data that identifies  
9 which order of the two orders in the  
10 distributor's inventory that chargeback  
11 data pertains to?

12 A. So the -- I will say what I know  
13 that exists in the chargeback data. I can't  
14 talk about the inventory system of the  
15 distributor.

16 The chargeback has an NDC number,  
17 the distributor that shipped it or that  
18 submitted it, I should say, to be most  
19 correct, as well as an order number and a  
20 date.

21 Q. And is it your understanding that  
22 the NDC code that's included pertains to  
23 the product that's being shipped?

24 A. I would understand the NDC to be  
25 the product, yes.

1

2           Q.    And not a particular order that's  
3   being shipped?

4           A.    I think you could characterize  
5   the NDC is part of a larger order.

6           Q.    I'm not sure I follow.

7                   The NDC relates to the type of  
8   product that's being shipped?

9           A.    So I have seen the data, have an  
10   order number, let's say one, two, three,  
11   four, five, have as part of it, and this is  
12   a hypothetical, but I've seen real examples  
13   of the data, an order for -- the same order  
14   number also have oxycodone, morphine and a  
15   hydrocodone product as part of that whole  
16   order.

17          Q.    And that's all under the same NDC  
18   code?

19          A.    No, different NDC codes folded  
20   underneath one order.

21          Q.    Okay.   But understood the NDC  
22   order only pertains to the product that's  
23   being shipped?

24          A.    Yes.   I think we've talked about  
25   that.

1

2 Q. Okay.

3 MR. GOLDSTEIN: Can I ask one  
4 more question? Thank you.

5 MR. LEDLIE: Sure.

6 BY MR. GOLDSTEIN:

7 Q. So if you turn to figure 1 in  
8 Mr. Buthusiem's report, it's right under  
9 paragraph 24.

10 A. Yup.

11 Q. Have you reviewed this figure  
12 before?

13 A. I've seen it before.

14 Q. Sorry. That wasn't my one final  
15 question.

16 (Laughter.)

17 Q. Do you see it reflected in that  
18 table that there is a Mallinckrodt peculiar  
19 order and a Mallinckrodt chargeback record?

20 Do you see that?

21 A. I see those two records on this  
22 document, yes.

23 Q. And do you see that the order  
24 numbers are different?

25 A. I do see that.

1

2           Q.    And what do you take that to  
3           mean?

4           A.    I mean what I assume, there are  
5           two different systems that have two  
6           different numbering.

7           Q.    And so this is my last question.

8                     Assuming that there are two  
9           different systems with two different  
10          numbering, it would not be possible to  
11          trace a peculiar order to -- that is to  
12          product that is shipped into Cuyahoga or  
13          Summit County and is subsequently the  
14          source of a chargeback request?

15                 MS. CONROY:  Objection.

16           A.    I don't agree with that.

17           Q.    Why not?

18           A.    Because our report traces  
19          peculiar orders and chargebacks.

20           Q.    So based on the substance of  
21          what's in your report today, you disagree  
22          with that statement?

23           A.    Yes, I disagree with that  
24          statement based off of my findings in my  
25          report.

1

2

MR. GOLDSTEIN: Okay. Thank you.

3

THE WITNESS: Thanks.

4

THE VIDEOGRAPHER: The time is

5

6:41 p.m.

6

(Time noted: 6:41 p.m.)

7

8

9

10

\_\_\_\_\_.

11

LACEY R. KELLER

12

13

14

Subscribed and sworn to before me

15

this day of 2019.

16

17

\_\_\_\_\_

18

19

20

21

22

23

24

25



1

2

C E R T I F I C A T E

3

4

STATE OF NEW YORK )

5

: ss.

6

COUNTY OF WESTCHESTER )

7

8

I, ANNETTE ARLEQUIN, a Notary

9

Public within and for the State of New

10

York, do hereby certify:

11

That LACEY R. KELLER, whose

12

deposition is hereinbefore set forth,

13

was duly sworn by me, and that the

14

transcript of such depositions is a

15

true record of the testimony given by

16

such witness.

17

I further certify that I am not

18

related to any of the parties to this

19

action by blood or marriage; and that I

20

am in no way interested in the outcome

21

of this matter.

22

IN WITNESS WHEREOF, I have hereunto

23

set my hand this 14th day of June, 2019.

24

25

\_\_\_\_\_  
ANNETTE ARLEQUIN, CCR, RPR, CRR, RSA

1

2

## I N D E X

3

4

WITNESS

PAGE

5

6

LACEY R. KELLER

7

MS. LEVY

12, 314

8

MS. LUCAS

203

9

MS. DEAN

263

10

MR. LAVELLE

270

11

MS. O'GORMAN

300

12

MR. HAMMOUD

320

13

MR. GOLDSTEIN

338, 392

14

MR. HYNES

377

15

MS. PERSIO

387

16

17

## I N D E X O F E X H I B I T S

18

DESCRIPTION

PAGE

19

Keller Exhibit 1, Track 1

15

20

Defendants' Second Amended Notice  
of Oral Videotaped Deposition of  
Lacey R. Keller

21

22

Keller Exhibit 2, List of

17

23

documents that respond to request  
1 in Exhibit A on Exhibit 1

24

25

1		
2	I N D E X O F E X H I B I T S (Cont'd.)	
3	DESCRIPTION	PAGE
4	Keller Exhibit 3, Gryphon	19
5	Strategies Invoice dated 5/30/19,	
6	Bates-stamped	
7	OPIOIDMDL_KELLER_000036 through	
8	35	
9		
10	Keller Exhibit 4, Resume of Lacey	30
11	R. Keller, not Bates-stamped	
12		
13	Keller Exhibit 5, Expert Analysis	60
14	of Lacey R. Keller, not	
15	Bates-stamped	
16		
17	Keller Exhibit 6, Spreadsheet,	136
18	not Bates-stamped	
19		
20	Keller Exhibit 7, Expert Analysis	157
21	- Addendum: Lacey R. Keller	
22		
23	Keller Exhibit 8, "Corrections to	179
24	Expert Analysis," prepared by	
25	Lacey R. Keller, not	
	Bates-stamped,	
	Keller Exhibit 9, Word document	184
	prepared by Keller, not	
	Bates-stamped,	
	Keller Exhibit 10, Expert	237
	Analysis - Errata Sheet: Lacey R.	
	Keller, not Bates-stamped,	

1		
2	I N D E X O F E X H I B I T S (Cont'd.)	
3	DESCRIPTION	PAGE
4	Keller Exhibit 11, Press release	241
5	entitled "FDA reports quality	
6	problems for data provided by the	
7	firm IQVIA that were used to	
8	inform estimates for some	
9	controlled substances"	
10	Keller Exhibit 12, Report on	249
11	Script.SQL, not Bates-stamped	
12	Keller Exhibit 13, Document	277
13	produced in native format	
14	beginning with Bates-stamp	
15	MNK-T1_0001315847	
16	Keller Exhibit 14, Email chain	281
17	beginning with email dated	
18	9/23/16 from K. Harper to	
19	McKenzie, Bates-stamped	
20	MNK-T1_0001315844 through 5846	
21	Keller Exhibit 15, Email chain	287
22	beginning with email dated	
23	10/31/11 from Oriente to Nichols,	
24	Bates-stamped MCKMMDL006332908	
25	through 2910	
	Keller Exhibit 16, Email chain	292
	beginning with email dated	
	10/31/11 from Lai to Oriente and	
	others, Bates-stamped	
	MCKMDL00626683 through 6685	
	Keller Exhibit 17, Purdue Pharma	304
	L.P. document Bates-stamped	
	PDD1503450011 through 0024	

1		
2	I N D E X O F E X H I B I T S (Cont'd.)	
3	DESCRIPTION	PAGE
4	Keller Exhibit 18, Document	307
	produced natively, Bates-stamped	
5	PPLP004449246	
6		
	Keller Exhibit 19, Letter on	316
7	Kirkland & Ellis letterhead dated	
	8/31/18 from Welch to Donna Welch	
8	to the Plaintiffs' Executive	
	Committee, not Bates-stamped	
9		
10	Keller Exhibit 20, Report of	338
	Edward J. Buthusiem of Berkeley	
11	Research Group, not Bates-stamped	
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1

2

## ERRATA SHEET FOR THE TRANSCRIPT OF:

3

CASE NAME: OPIOID LITIGATION

4

DATE: JUNE 13, 2019

5

DEPONENT: LACEY R. KELLER - CONFIDENTIAL

6

Pg.	Ln.	Now Reads	Should Read	Reason
7	—	—	—	—
8	—	—	—	—
9	—	—	—	—
10	—	—	—	—
11	—	—	—	—
12	—	—	—	—
13	—	—	—	—
14	—	—	—	—
15	—	—	—	—
16	—	—	—	—

7

8

9

10

11

12

13

14

15

16

17

18

19

LACEY R. KELLER

20

SUBSCRIBED AND SWORN BEFORE ME

21

THIS \_\_\_\_ DAY OF \_\_\_\_\_ 2019.

22

23

24

(Notary Public)

25

MY COMMISSION EXPIRES: \_\_\_\_\_